SONY

Network Audio System/Server

Operating Instructions

Getting started

Network connections

Enjoying audio content

Enjoying Sony Multiple-Room Products

Additional information

Troubleshooting

Precautions/Specifications

http://www.sony.net/

MP3

Made for iPod iPhone

bg WiFi CERTIFIED®

dlna CERTIFIED™

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4-192-583-**12**(1)

NAS-SV20i/SV20Di

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To reduce the risk of fire, do not cover the ventilation opening of the apparatus with newspapers, tablecloths, curtains, etc.
Do not place the naked flame sources such as lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Do not expose batteries or apparatus with battery-installed to excessive heat such as sunshine, fire or the like.

The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.

The nameplate is located on the bottom exterior of the main unit (NAS-SV20i/SV20Di).

For customers in the United States

Owner's Record

The model and serial numbers are located on the bottom of the unit. Record these numbers in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.
Model No. _____
Serial No. _____

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The following indications are located on the bottom exterior of the main unit (NAS-SV20i/SV20Di).

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

The following FCC statement applies only to the version of this model manufactured for sale in the U.S.A. Other versions may not comply with FCC technical regulations.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined

by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Properly shielded and grounded cables and connectors must be used for connection to host computers and / or peripherals in order to meet FCC emission limits.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

For customers in Canada

Properly shielded and grounded cables and connectors must be used for connection to host computers and / or peripherals.

Operation is subject to the following two conditions:
(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

For customers in Europe

Properly shielded and grounded cables and connectors must be used for connection to host computers and / or peripherals.

Notice for customers: the following information is only applicable to equipment sold in countries applying EU directives.

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku, Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters, please refer to the addresses given in separate service or guarantee documents.

Hereby, Sony Corp., declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
For details, please access the following URL:
http://www.compliance.sony.de/

This product is intended to be used in the following countries:
AT, BE, CH, CZ, DE, DK, ES, FI, FR, GB, GR, HU, IE, IT, NL, NO, PL, PT, RO, SE, SK

For customers who use this product in the following countries:

Norway:

Use of this radio equipment is not allowed in the geographical area within a radius of 20 km from the centre of Ny-Alesund, Svalbard in Norway.

France:

The WLAN feature of this Network Audio System/Server shall exclusively be used inside buildings. Any use of the WLAN feature of this Network Audio System/Server outside of the buildings is prohibited on the French territory. Please make sure that the WLAN feature of this Network Audio System/Server is disabled before any use outside of the buildings. (ART Decision 2002-1009 as amended by ART Decision 03-908, relating to radio-frequencies use restrictions.)

Italy:

Use of the RLAN network is governed:
- with respect to private use, by the Legislative Decree of 1.8.2003, no. 259 ("Code of Electronic Communications"). In particular Article 104 indicates when the prior obtainment of a general authorization is required and Art. 105 indicates when free use is permitted;
- with respect to the supply to the public of the RLAN access to telecom networks and services, by the Ministerial Decree 28.5.2003, as amended, and Art. 25 (general authorization for electronic communications networks and services) of the Code of electronic communications.

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste.
On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead.
By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.
In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only.
To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment.
For all other batteries, please view the section on how to remove the battery from the product safely.
Hand the battery over to the applicable collection point for the recycling of waste batteries.
For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Before operating this product

About copyright protection

Music data cannot be used without the permission of the copyright holder except when used solely for personal enjoyment.

About the illustrations used in this manual

Illustrations and screens used in this manual may vary from the actual screens.
The model for the USA is basically used for the illustrations in this manual. However, the illustrations of a certain model which may have different features are used in this manual as well, to explain the feature.

How to use this manual

This manual explains how to operate the unit mainly using the buttons on the remote control. Buttons on the main unit with the same or similar name as that on the remote control can be used to perform the same operations.

About services that can be used in conjunction with an Internet connection

Please note that Internet-based services are subject to change or termination without notice.

Malfunctions that occur during the normal use of the unit will be repaired by Sony in accordance with the conditions defined in the limited warranty for this unit. However, Sony will not be liable for any consequences arising from a failure to play caused by a damaged or malfunctioning unit.

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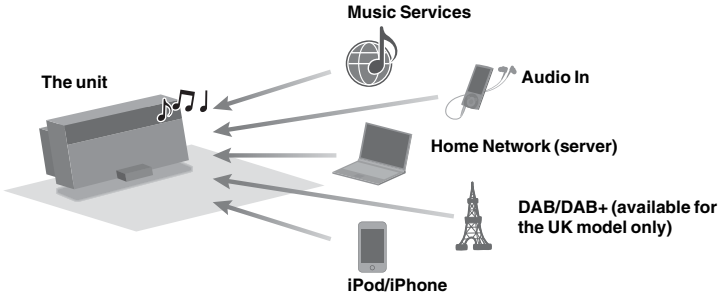
Features of this unit

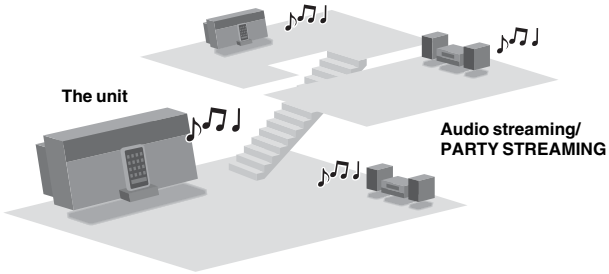
Enjoying various music

You can enjoy listening to music from sound sources with large amounts of music content.
You can listen to your iPod or iPhone (page 33), play audio content stored on a server (such as your computer) (page 38), and play audio content streamed by music services via the Internet (page 44).



Using the unit with DLNA-compliant devices

This unit complies with the DLNA standard. You can listen to music in various ways using the unit together with other DLNA-compliant devices. Connecting it to other DLNA devices allows you to enjoy audio content stored on a server, or stream audio content to other devices, even though they are all placed in different rooms (page 52).
Furthermore, the PARTY STREAMING function of the unit allows you to play back audio content with other devices that have a PARTY STREAMING function at the same time (page 50). You can use an iPod/iPhone placed on the unit, a server (a computer, etc.), music services, or an external device connected to the AUDIO IN jack of the unit as a sound source for the PARTY STREAMING function.



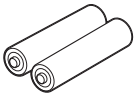
About DLNA

DLNA is an abbreviation for Digital Living Network Alliance. It is the name of an organization that establishes guidelines (DLNA guidelines), and it is also the name of the method that allows devices in a house to share digital content (such as music data, image data, etc.) over a home network.

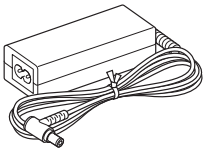
Checking the supplied accessories

❑ **Remote control (1)**

❑ **R6 (size AA) batteries (2)**

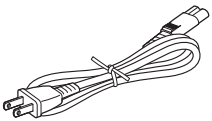


❑ **AC adaptor (1)**

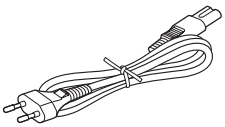


❑ **Power cord (1)**

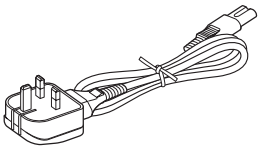
Models for the USA and Canada



Models for Europe (except for the UK model)



Model for the UK

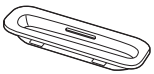


❑ **Dock Adapters for iPhone models (1 set)**

The adapter number is shown on the bottom of Dock Adapter.
For iPod models, use the Dock Adapter supplied with your iPod, or purchase a compatible dock adapter from Apple Inc.

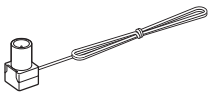
⑫: For iPhone

⑮: For iPhone 3G and iPhone 3GS



⑲: For iPhone 4

❑ **DAB/DAB+ wire antenna (1) (for the UK model only)**



❑ **Operating Instructions (this manual) (1)**

This manual provides full explanations of the various settings, operations and the network connection procedure.
This manual also contains precautions for the safe use of the unit.

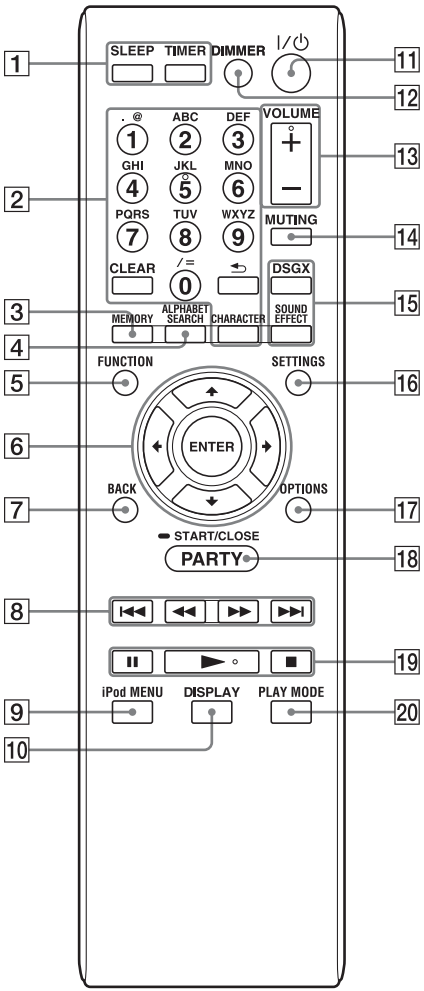
❑ **Quick Setup Guide (1)**

This manual explains how to set up the network connections and use the functions that can be used in conjunction with the network connections.

If you find any accessories missing or damaged, please contact your nearest Sony dealer.

Guide to parts and controls

Remote control



1 SLEEP and TIMER buttons

- SLEEP button (page 59)
  Use to set or confirm the sleep timer setting.
- TIMER button (page 60)
  Use to set the timer.

2 Numeric*/text buttons

Use to select a track during playback or to enter text (pages 19, 27, 37, 45, 57).

3 MEMORY button

Use to preset DAB/DAB+ stations (UK model only) (page 37) or stations of the music services (page 45).

4 ALPHABET SEARCH button

Use to search for an item using a keyword (page 49).

5 FUNCTION button

Use to select a function (pages 18, 33).
The unit has operating functions based on the sound source that the unit can play (iPod & iPhone function, Home Network function, etc.). Each press of this button changes the function in turn.

6 ↑/↓/←/→/ENTER buttons

Use to select an item (artist, album, track, menu item, etc.) and enter the selection (page 18, 19).

- ↑ and ↓ buttons (page 18)
  Use to select an item that is listed on the display. Use to move the focus up or down.
- ← and → buttons (pages 19, 49)
  Use to move the focus while entering text.
  Use to select the previous match or the next match while searching for an item using a keyword.
- ENTER button (page 18)
  Use to enter a selected item or setting.
  Press this button when an error message or a completion message is displayed, and the message will disappear.

7 BACK button

Use to go back to the previous display (pages 18, 27, 34).

8 I◄◄/►►I, ◄◄/►► buttons

- I◄◄ and ►►I buttons (pages 34, 36)
  Use to find the beginning of the current, the previous, or the next track.
  Press and hold the button to find a point in a track when the iPod & iPhone function is selected.
  Use to select a preset DAB/DAB+ station, or the previous or the next DAB/DAB+ station in a service component list (UK model only).
- ◄◄/►► buttons (page 34)
  Use to find a point in a track.

9 iPod MENU button

Use to display iPod/iPhone content lists, or use to go back to the previous iPod/iPhone content list (page 34).

10 DISPLAY button

Use to display various information such as the time information of a track, an artist name, an album name, clock, etc. (page 34)

11 I/⏻ (power) button

Use to turn the power on or off (page 17).

12 DIMMER button

Use to change the brightness of the display. Each press of this button changes the brightness of the display to bright or dark.

13 VOLUME +*/– button

Use to adjust the volume.

14 MUTING button

Use to turn off the sound.

15 DSGX and SOUND EFFECT buttons

- DSGX button (page 58)
  Use to generate more dynamic sound (Dynamic Sound Generator X-tra).
- SOUND EFFECT button (page 58)
  Use to select a preset customized sound effect.

16 SETTINGS button

Use to display the settings menu (pages 18, 26, 55). Use to enter clock, network, and other system settings.

17 OPTIONS button

Use to display the options menu (pages 18, 27, 35, 56).
Menu items will vary according to the selected function.

18 PARTY button

Use to operate the PARTY STREAMING function (page 50).
Press and hold the button for a few seconds to start or close a PARTY.

19 Operation buttons

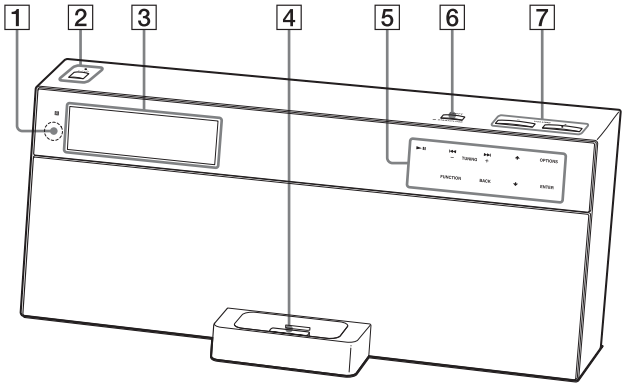
- ❚❚ (pause) button
- ■ (stop) button
- ► (play) button*

20 PLAY MODE button

Use to select a play mode (page 48).

* An asterisk (*) indicates buttons that have a tactile dot (number “5” button, VOLUME + button and ► (play) button).

Main unit



1 Remote sensor

2 I/⏻ (power) button and the on/standby indicator

- **I/⏻** (power) button (page 17)
  Use to turn the power on or off.
- On/standby indicator (page 17)
  The color indicates the power status of the unit.
  – Green: The unit is turned on.
  – Red: The "Network Standby" mode of the unit is set to "Off."
  – Amber: The "Network Standby" mode of the unit is set to "On."

3 Display window

For details on the contents of the display, see "Display window" (page 14).

4 iPod/iPhone dock

Place an iPod or iPhone into the iPod/iPhone dock to listen to audio content stored on the iPod/iPhone (page 16).

5 Touch panel operation buttons

- **►II** (play or pause) button
- **I◄◄/►►I** buttons (pages 34, 36)
  Use to find the beginning of the current, the previous, or the next track.
  Press and hold the button to find a point in a track.
- TUNING +/– buttons (UK model only)
  Use to select a preset DAB/DAB+ station, or the previous or the next DAB/DAB+ station in a service component list.
- **↑/↓** buttons (page 18)
  Use to select an item that is listed on the display. Use to move the focus up or down.
- OPTIONS button (pages 18, 27, 35, 56)
  Use to display the options menu.
  Menu items will vary according to the selected function.
- FUNCTION button (pages 18, 33)
  Use to select a function.
- BACK button (pages 18, 27, 34)
  Use to go back to the previous display.
- ENTER button (page 18)
  Use to enter a selected item or setting.

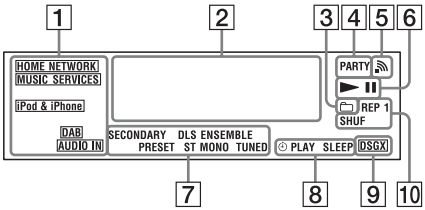
6 PARTY button

Use to operate the PARTY STREAMING function (page 50).
Press and hold the button for a few seconds to start or close a PARTY.

7 VOLUME +/– button

Use to adjust the volume.

Display window



1 Function indicators
Light up when a function is selected (pages 18, 33).

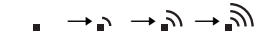
2 Text information
Displays various information such as track names, album names, artist names, clock, progress bar, etc.
The following symbols appear on the display. The meaning of each symbol is as follows.

Symbol	Description
▲ / ▼	The message is continued to/ from the next/previous page. Press ↑/↓ to see the entire text.
>	There are selectable items after this item (for example, the menu has a deeper level).

3 🗀 indicator
Lights up when the playback range is set to "Current Folder" (factory setting) or "Parent Folder" while the unit is using the Home Network function (page 42).

4 PARTY indicator
Lights up when the PARTY STREAMING function is active (page 50).

5 Wireless LAN signal strength indicator
This antenna icon indicates the strength of the wireless LAN signal. More segments indicate a stronger signal.



6 ►II (play/pause) indicator

7 Tuner reception indicators (UK model only)
Light up when the DAB/DAB+ function is active (page 36).

8 Timer indicators
Light up when the Sleep Timer or Play Timer is set (page 59).

9 DSGX indicator
Lights up when the DSGX function is set to "DSGX On" (page 58).

10 Play mode indicators
Light up when the play mode is set (page 48).

Preparing the unit and the remote control

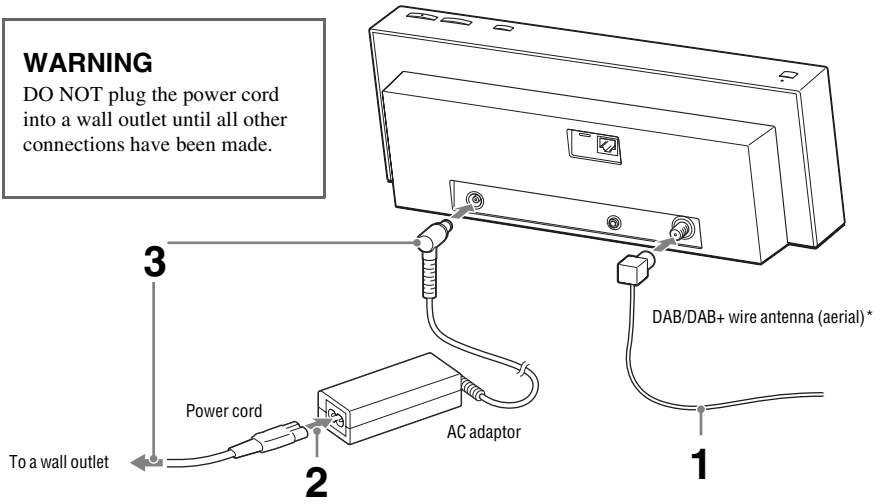
Connecting the antenna and the power cord

Note

If you place the unit in an unstable location, it may move when you connect or disconnect cables. Hold the unit firmly when you connect or disconnect cables.

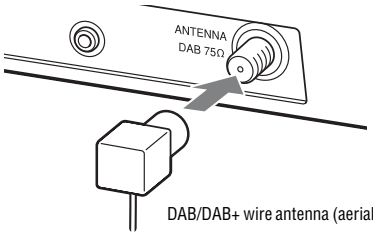
WARNING

DO NOT plug the power cord into a wall outlet until all other connections have been made.



* The DAB/DAB+ wire antenna (aerial) and the ANTENNA DAB 75 Ω are available for the UK model only.

1 Connect the DAB/DAB+ wire antenna (aerial) to the ANTENNA DAB 75 Ω terminal (UK model only).

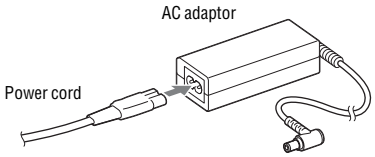


Use an external DAB/DAB+ antenna for a more robust DAB/DAB+ signal. It is recommended you only use the supplied DAB/DAB+ wire antenna for areas of strong DAB/DAB+ reception or as a temporary measure until you install an optional external antenna.

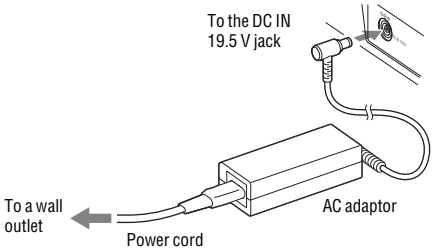
Use a 75 Ω coaxial cable with male F type connector to connect the unit to an external antenna.

Be sure that the antenna is fully extended.

2 Connect the power cord to the AC adaptor.



3 Connect the AC adaptor to the unit, and then plug the power cord into a wall outlet.

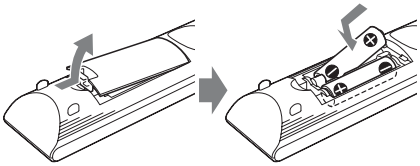


WARNING

DO NOT plug the power cord into a wall outlet until other connections have been made.

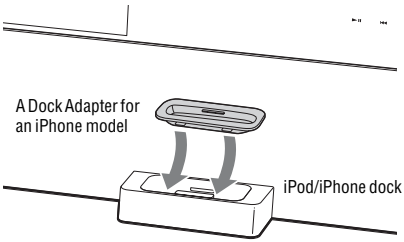
Inserting batteries into the remote control

Remove the battery compartment lid, and then insert the supplied R6 (size AA) batteries (⊖ end first) matching the polarities as shown below. When the remote control is no longer able to operate the unit, replace both batteries with new ones.



Using an iPod/iPhone

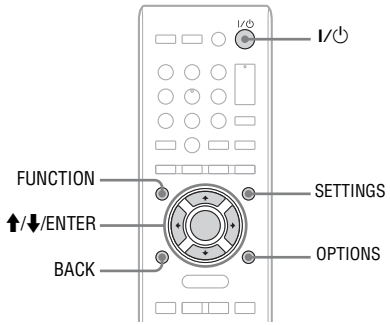
Insert a Dock Adapter into the iPod/iPhone dock. When using an iPod model, use the dock adapter supplied with your iPod.
When using an iPhone model, use one of the Dock Adapters for iPhone models supplied with this unit.



To remove the Dock Adapter for an iPhone model, pull it up with your fingernail or a flat object using the slot inside the adapter.

Basic operations

This section explains the basic operations of the unit.



Turning on this unit

1 Connect the power cord to a wall outlet.

When you connect the power cord to a wall outlet, the unit turns on once and the on/standby indicator lights up in green. After a while, the unit turns off automatically and the on/standby indicator changes to red.

2 Press I/⏻ (power).

The unit turns on and the on/standby indicator lights up in green.
When the unit is turned on for the first time after purchase, you are required to make the initial settings. If this is the case, see "Performing initial setup operations" (page 21).

To turn off the unit

Press I/⏻ on either the remote control or the main unit. When the unit is turned off and enters the standby mode, the color of the on/standby indicator changes.
The unit has two standby modes, network standby - off and network standby - on. For details, see "Setting the network standby mode" (page 18).

- **Network standby - off mode (factory setting)**
  This standby mode consumes less power than network standby - on mode, though the unit takes more time to resume operations when powered on again. The on/standby indicator lights up in red in this mode.
- **Network standby - on mode**
  In this standby mode, the unit is always connected to the network and remains partially active to quickly resume operations when controlled over the network, or powered on again. In this mode, the on/standby indicator lights up in amber and the clock appears on the display. To set the network standby mode, see "Setting the network standby mode" (page 18).

Setting the network standby mode

While the "Network Standby" mode is set to "On," the unit can always be connected and controlled over the network.

1 Press SETTINGS to enter the settings menu.

2 Press ↑/↓ to select "Network Standby" and press ENTER.

3 Press ↑/↓ to select "Off" or "On" and press ENTER.

Display	Description
◆ Off	The unit consumes less power than the network standby - on mode, though the unit takes more time to resume operations when powered on again. The on/standby indicator lights up in red.
On	The unit is connected to the network even though the power of the unit is turned off, and resumes operations when controlled over the network. The on/standby indicator lights up in amber.

(◆: Factory setting)

Selecting items with the unit

You can use the ↑/↓/ENTER buttons to select an item (menu item, artist, track, etc.) and enter the selection.

1 When a list of items (artists, tracks, menu items, etc.) is displayed, press ↑/↓ to select the desired item.

The currently selected item is focused.
Press and hold ↑/↓ to scroll the display.
Press BACK to go back to the previous display.

2 Press ENTER.

The selected item is set or the selected process is carried out.

To select a function

The unit has operating functions based on the sound source that the unit can play (iPod & iPhone function, Home Network function, etc.).
Press FUNCTION repeatedly to select the desired function.

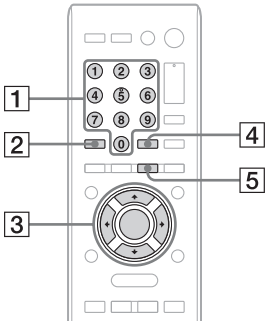
About menus for this unit

This unit has two menus, the settings menu and the options menu, and they allow you to make various settings.

- **Settings menu (page 75)**
  Press SETTINGS to display the settings menu. You can make various settings such as network settings, network standby settings, music services settings, etc.
- **Options menu**
  Press OPTIONS to display the options menu. Menu items will vary according to the selected function.

Entering text

Entering text may be required during some setup operations such as network settings. You can enter text using the remote control.



1 Numeric/text buttons

Press the button with the desired letter (ABC, DEF, etc.). Press repeatedly until the desired letter appears.

2 CLEAR button

Press this button to erase a letter that was just entered.

3 ↑/↓/←/→/ENTER buttons

- ↑/↓/←/→ buttons
  Use these buttons to move the cursor.
- ENTER button
  Use this button to enter a text string.

4 ⮌ button

Press this button so that the order of the characters which are assigned to a button appear in reverse. For example, pressing the no. 2 button repeatedly normally displays “A,” “B,” “C,” and “2,” however, pressing this button changes the order to “2,” “C,” “B,” and “A.”

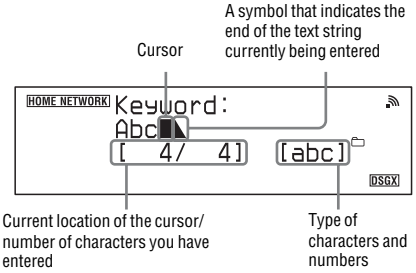
5 CHARACTER button

This button selects the type of characters and numbers. Each time you press the button, the type of characters and numbers changes in the sequence “abc” (lowercase letters of the alphabet and numbers) → “ABC” (uppercase letters of the alphabet and numbers) → “123” (numbers only).

If you want to enter punctuation marks (e.g., !, ?, etc.) and other symbols (e.g., #, %, etc.), select “abc” or “ABC.”

Example of a character input display

The display shown below is an example of the character input display that appears when you are searching for an item using a keyword.



How to enter text

1 Press CHARACTER repeatedly to select the desired type (“abc,” “ABC,” or “123”).

2 Press the corresponding numeric/text button to enter the desired character, then press → to move the cursor to the next input position.
Repeat this step to enter the text string.

3 Press ENTER to confirm and save the text string.

Other operations

To	Do the following
Restore the previous condition	Press BACK.
Move the cursor	Press ←/→ to move the cursor left or right. Press ↑/↓ so that the cursor moves to the beginning or to the end of the text string.

To select the type of characters and numbers

Press CHARACTER to select “abc,” “ABC,” or “123.”

To enter punctuation marks (e.g., !, ?, etc.) or symbols (e.g., #, %, etc.)

Press 1 or 0 of the numeric/text button repeatedly while the type of characters is set to “abc” or “ABC.”

To enter a space

Press 0 of the numeric/text button repeatedly while the type of characters is set to “abc” or “ABC.”

To delete a character

Press CLEAR.

Characters that are assigned to each numeric/text button

The table below shows the characters and numbers that you can enter for each type (“abc,” “ABC,” or “123”). You can check the characters, numbers, and symbols that are assigned to each numeric text button.

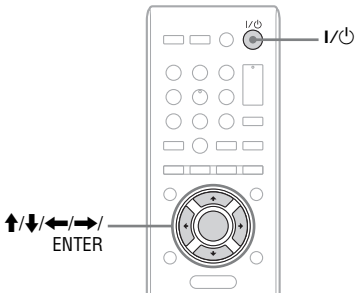
Numeric /text button	abc	ABC	123
1	. , ! @ ´ ` : ; ( ) [ ] { } < > 1	. , ! @ ´ ` : ; ( ) [ ] { } < > 1	1
2	a b c 2	A B C 2	2
3	d e f 3	D E F 3	3
4	g h i 4	G H I 4	4
5	j k l 5	J K L 5	5
6	m n o 6	M N O 6	6
7	p q r s 7	P Q R S 7	7
8	t u v 8	T U V 8	8
9	w x y z 9	W X Y Z 9	9
0	/ \	- ~ = _ + # $ % & ^ “ * ? ␣ (space) 0	/ \	- ~ = _ + # $ % & ^ “ * ? ␣ (space) 0	0

Performing initial setup operations

When the unit is turned on for the first time after you purchase it, initial setup operations are required. The initial setup includes the initial setting procedure for the unit (this will be performed automatically), network settings, the clock settings, and obtaining a service list (for the Music Services function).
When you are indicated to set the network or the clock, refer to the respective pages.
Entering characters will be required during the setup operations. For details on entering characters, see “Entering text” (page 19).

WARNING

Do not disconnect the power cord while the unit is making the initial setup operations. Doing so may cause the unit to malfunction.



1 Press I/⏻ (power) to turn on the unit.

2 When “Set the items required to use this unit. Press ENTER to continue.” appears, press ENTER.

3 When the “Start setup?” display appears, select “OK.”

The unit starts making the initial settings.

4 When the “Network Settings” display appears, select “Yes.”

The “Connection” display appears.
Before you start setting up a network, check the chart on page 25 to decide which connection method you will use to connect the unit to your home network. Then, refer to the respective page (as follows) to perform the setup operation for the connection method chosen.

When you use a wireless connection

- Access point scan method:
  Go to step 3 of “Searching for an access point and setting up a wireless network (access point scan method)” (page 27).
- Manual connection method:
  Go to step 3 of “If you cannot find the desired network name (SSID) (manual setup method)” (page 28).
- WPS push button configuration method:
  Go to step 3 of “Setting up a wireless network using the WPS push button configuration method” (page 28).
- WPS PIN code method:
  Go to step 3 of “Setting up a wireless network using the WPS PIN code method” (page 29).

When you use a wired connection

Go to step 4 of “Setting up a wired network” (page 30).
Make sure that the network (LAN) cable has been connected to the NETWORK port on

the rear of the unit. See step 1 of "Setting up a wired network" (page 30), as well.
When the network settings have been completed, the unit changes to the clock settings display.

5 When the "Date&Time" display appears, select "Auto" or "Manual."

For details on the clock settings, refer to the respective page (as follows) to set the clock.

- When you select "Auto":
  Go to step 5 of "Setting the clock through an Internet connection" (page 23).
- When you select "Manual":
  Go to step 5 of "To set the clock manually" (page 24).

When the clock settings have been completed, the "Get Service List" display appears, allowing you to obtain a list of available music services.

Note

If you do not set up a network connection, you cannot set the clock by selecting "Auto" in this step.

6 When the "Get Service List" display appears, select "OK."

The unit obtains the service list for the Music Services function.

Note

If you do not set up a network connection, you cannot obtain the list of available music services.

When the list is obtained, "Refreshed Service List." appears, then the unit starts making the server and the renderer (network controlled player)* settings automatically. Wait until the unit finishes making the settings.

* For details on the server and the renderer (network controlled player), see page 52.

When the initial setup process has been completed, "Setup is complete." appears on the display and the unit changes to the iPod & iPhone function automatically.

To go back to the previous display

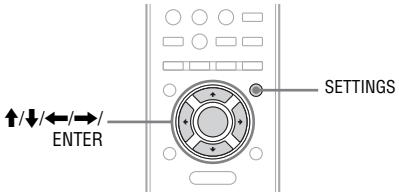
Press BACK when you need to go back to the previous display, such as when an error occurs during the setup operation.

To cancel initial settings

Press FUNCTION. When "Cancel setup?" appears, select "Yes."
If you select "Yes" to cancel the initial setup process before it is completed, "Setup later?" appears. Select "Yes" or "No." If you select "Yes," the initial setup process is required again the next time you turn the unit on.

Setting the clock

The time on the clock must be set correctly for the proper operation of functions. The clock can be set either automatically by connecting the unit to the Internet, or manually using the remote control.



Setting the clock through an Internet connection

You can set the clock by connecting the unit to the NTP (Network Time Protocol) server on the Internet. Before using this function, make sure the network settings have already been made properly.

1 Press SETTINGS to enter the settings menu and select “Date&Time Settings.”

2 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select “Date&Time Setting Method.”

The “Date&Time” display appears.
If you are performing the initial setup operation and indicated that you want to set the clock (page 22), this display appears.

4 Select “Auto.”

5 Select the city where the unit is being used from the “Time Zone” display.

The “NTP Server” display appears.
If the desired city does not appear in the “Time Zone,” select a city that is within the same time zone as the desired city.

6 Press ENTER.

The unit will connect to the default server in step 7.
If you want to use a different NTP server, erase “NtpServer” and enter the name or the IP address of the NTP server that you want to use, then press ENTER.
For details on entering text, see “Entering text” (page 19).
When you want to change the specified NTP server back to the default one, enter “NtpServer” in this step.

7 When “Set via Internet” appears, select “OK.”

When the clock settings have been completed, “Save settings.” and the clock appear on the display.

A list of available time zones

The following items appear in step 5. Select the city where the unit is being used.
GMT+13 Nukualofa
GMT+12 Auckland
GMT+11 Noumea
GMT+10 Sydney, Port Moresby
GMT+9:30 Adelaide
GMT+9 Tokyo, Seoul
GMT+8 Beijing, Singapore
GMT+7 Bangkok, Jakarta
GMT+6:30 Yangon
GMT+6 Dhaka
GMT+5:45 Kathmandu
GMT+5:30 New Delhi
GMT+5 Karachi, Islamabad
GMT+4:30 Kabul
GMT+4 Abu Dhabi, Tbilisi
GMT+3:30 Teheran
GMT+3 Moscow, Riyadh
GMT+2 Athens, Helsinki
GMT+1 Paris, Berlin
GMT+0 London, Lisbon
GMT-1 Azores
GMT-2
GMT-3 Sao Paulo, Buenos Aires
GMT-3:30 St. John's
GMT-4 Halifax, Santiago
GMT-5 New York, Toronto
GMT-6 Chicago, Mexico City
GMT-7 Denver, Calgary
GMT-8 Los Angeles, Vancouver
GMT-9 Anchorage
GMT-10 Honolulu, Papeete
GMT-11 Pago Pago
GMT-12

To set the clock manually

You can set the clock manually using the remote control.

1 Press SETTINGS to enter the settings menu and select "Date&Time Settings."

2 When "Playback and network functions cannot be used during the setup. Press ENTER to continue." appears, press ENTER.

When " ▼ " is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select "Date&Time Setting Method."

The "Date&Time" display appears.
If you are performing the initial setup operation and indicated that you want to set the clock (page 22), this display appears.

4 Select "Manual."

5 Set the date.

Press ←/→ to select the item to be set, and press ↑/↓ to adjust the value. When you finish setting the date, press ENTER.
Models for the USA and Canada use the month/day/year style for the date format.
Models for Europe use the day/month/year style for the date format.

6 Set the time.

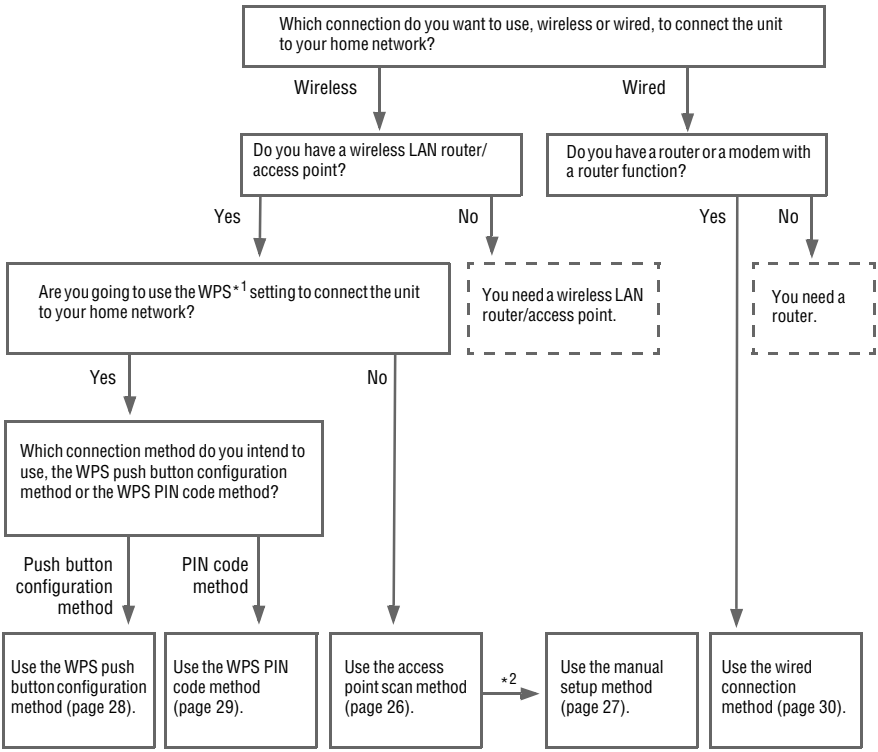
Repeat the same operation as that in step 5.
Models for the USA and Canada use a 12-hour clock and models for Europe use a 24-hour clock.
When you finish setting the time, press ENTER.
When the clock settings have been completed, "Save settings." and the clock appear on the display.

Tips

- You can set the time zone from the settings menu. Enter the settings menu and select "Date&Time Settings" - "Time Zone." Select the time zone from the list. The time zone setting can be changed only when the clock has been set automatically using the NTP server (page 23).
- You can set the daylight saving time setting. Enter the settings menu and select "Date&Time Settings" - "Daylight Saving." Select "Standard" or "Daylight Saving."

Connecting the unit to your home network (network settings)

This section explains how to connect the unit to your home network. You can connect the unit to the network either through a wireless or a wired LAN. Check your connection method using the chart below. For details on which connection method your wireless LAN router/access point supports, refer to the operating manual of your wireless LAN router/access point.


Which connection do you want to use, wireless or wired, to connect the unit to your home network?
Wireless
Wired
Do you have a wireless LAN router/ access point?
Do you have a router or a modem with a router function?
Yes
No
Yes
No
Are you going to use the WPS*1 setting to connect the unit to your home network?
You need a wireless LAN router/access point.
You need a router.
Yes
No
Which connection method do you intend to use, the WPS push button configuration method or the WPS PIN code method?
Push button configuration method
PIN code method
Use the WPS push button configuration method (page 28).
Use the WPS PIN code method (page 29).
Use the access point scan method (page 26).
*2
Use the manual setup method (page 27).
Use the wired connection method (page 30).

*1 WPS (Wi-Fi Protected Setup) is a standard created by the Wi-Fi Alliance allowing you to setup a wireless network easily and securely.

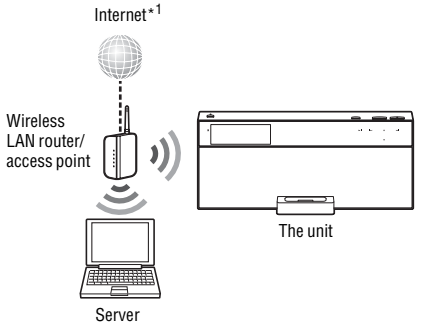
*2 You can use the manual setup method when you cannot find the desired access point using the access point scan method.

What the unit can do when connected to a network

- The unit can play audio content stored on the server (a computer, etc.) on your home network (page 38).
- The unit can play music services via the Internet (page 44).

Checking the wireless LAN environment of your home network

Read the following first



*1 To listen to music services, you need an environment that allows you to access the Internet.

You must have the following environment to use the Home Network, Music Services, and PARTY STREAMING functions. Confirm your environment in advance.

- ❏ **A wireless LAN home network environment must be available. (Make sure that a wireless LAN router is used.)**
- ❏ **A device that can be used as a server (a computer, etc.) must be connected to your wireless LAN home network.*2**
- ❏ **Internet access must be available. (When you want to listen to music services or use an NTP server to set the clock.)**

*2 For details on servers which are compatible with this unit, see page 38.

There are several connection methods you can use to set up a wireless network: searching for an access point, using a WPS connecting method (either the push button configuration method or the PIN code method), or manual setting. Select the connection method that can be used for your home network using the chart on page 25.

Notes

- Make sure not to use the wireless LAN function in a place where medical equipment (such as a pacemaker) is used or the use of wireless communication is prohibited.
- Before connecting to your home network, you need to prepare a wireless LAN router/access point. For details, refer to the operating manual of the device.
- Depending on your home network environment, the wireless LAN router/access point may have been set up such that it cannot be connected using WPS, even though it is compatible with WPS. For details on whether your wireless LAN router/access point is compatible or not compatible with WPS, and on the setup of a WPS connection, refer to the operating manual of your wireless LAN router/access point.
- You may encounter setup difficulties if the unit and the wireless LAN router/access point are located too far from each other. If you do, move the devices closer to each other.

Searching for an access point and setting up a wireless network (access point scan method)

You can set up a wireless network by searching for the access point. Confirm you have the following information in advance, as you will need it to set up the network with this connection method.

- ❏ **The network name (SSID*1) that identifies your network.*2 (This will be needed in step 6.)**

  :_____
- ❏ **If your wireless home network is secured by encryption, the security key (WEP key, WPA/WPA2 key) for your network.*2 (This will be needed in step 7.)**

  :_____

*1 SSID (Service Set IDentifier) is a name that identifies a particular access point.

*2 This information should be available from a label on your wireless LAN router/access point, from the operating manual, from the person who set up your wireless network, or from the information provided by your Internet service provider.

1 Press SETTINGS to enter the settings menu and select “Network Settings.”

2 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select “Connection Method.”

The “Connection” display appears.
If you are performing the initial setup operation and indicated that you want to set the network connection (page 21), this display appears.

4 Select “Wireless LAN.”

5 Select “Access Point Scan.”

The unit automatically starts searching for access points and displays a list of network names (SSIDs) of available access points. The unit can display a maximum of 20 network names (SSIDs) on the list.

6 Select the network name (SSID) from the list.

If the desired network name (SSID) does not appear on the display, or if a network name (SSID) cannot be detected, press BACK so that the unit returns to step 5, then perform step 5 again. If the network name (SSID) still does not appear or still cannot be detected, you can input the network name (SSID) manually. See “If you cannot find the desired network name (SSID) (manual setup method)” (page 27).

7 Enter the security key (WEP Key, WPA/WPA2 Key) of your network, and then press ENTER.

For details on how to input characters, see “Entering text” (page 19).
The security key appears as “*****”.

Note

If your network has not been secured by encryption (using the security key), the security key insertion display does not appear.

8 When “Save settings and check connection. Press ENTER to continue.” appears, press ENTER.

It may take a while for the unit to complete the network settings.
When the network settings have been completed, “Complete.” appears and lights up on the display.
If you are making the initial settings, the “Date&Time” display, step 5 of “Performing initial setup operations,” appears. Go back to page 22 and continue the initial setting process.

9 Make the server settings.

To listen to audio content stored on the server through the network that have set up in this section, you need to set up your server (page 38).

Tip

You can view information on the access points when a list of network names (SSIDs) is displayed on step 5.
Place the focus on the access point (network name (SSID)) for which you want to view the information and press OPTIONS. Select “Information” from the options menu. You can check “SSID” (network name), “Signal Strength,” and “Security Method” (WPA2, etc.) for the selected access point.

If you cannot find the desired network name (SSID) (manual setup method)

If the desired network name (SSID) does not appear in the list of network names (SSIDs), you can enter the network name (SSID) manually.

1 Press SETTINGS to enter the settings menu and select “Network Settings.”

2 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

When " ▼ " is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select "Connection Method."

The "Connection" display appears.
If you are performing the initial setup operation and indicated that you want to set the network connection (page 21), this display appears.

4 Select "Wireless LAN."

5 Select "Manual Registration" - "Direct Input."

6 Enter the network name (SSID), and then press ENTER.

For details on how to input characters, see "Entering text" (page 19).

7 Select the security setting from the "Security Setting" display.

You can select from "WPA/WPA2-PSK (AES)," "WPA/WPA2-PSK (TKIP)," "WEP," or "None."

Note

If you select "None," the unit skips step 8 and goes to step 9.

8 Enter the security key (WEP Key, WPA/WPA2 Key) of your network, and then press ENTER.

For details on how to input characters, see "Entering text" (page 19).
The security key appears as "*****".

9 When "Save settings and check connection. Press ENTER to continue." appears, press ENTER.

It may take a while for the unit to complete the network settings.
When the network settings have been completed, "Complete." appears and lights up on the display.
If you are making the initial settings, the "Date&Time" display, step 5 of "Performing initial setup operations," appears. Go back to page 22 and continue the initial setting process.

10 Make the server settings.

To listen to audio content stored on the server through the network that have set up in this section, you need to set up your server (page 38).

Setting up a wireless network using an access point compliant with WPS

You can easily set up a wireless network using an access point compliant with WPS. WPS setting can be made either by the push-button configuration method or the PIN (Personal Identification Number) code method.

What is WPS (Wi-Fi Protected Setup)?

WPS is a standard created by the Wi-Fi Alliance allowing you to setup a wireless network easily and securely.

Setting up a wireless network using the WPS push button configuration method

You can easily set up a WPS wireless connection with one push of the designated button.

1 Press SETTINGS to enter the settings menu and select "Network Settings."

2 When "Playback and network functions cannot be used during the setup. Press ENTER to continue." appears, press ENTER.

When " ▼ " is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

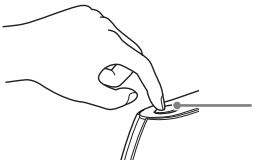
3 Select "Connection Method."

The "Connection" display appears.
If you are performing the initial setup operation and indicated that you want to set the network connection (page 21), this display appears.

4 Select "Wireless LAN."

5 Select "WPS Push."

6 When the message that tells you to press the WPS button on the access point appears, press the WPS button on the access point for a few seconds, within two minutes.



When the wireless LAN router/access point has been registered with the unit, “Access point registration is complete.” appears.
It may take a while for the unit to complete the network settings.

7 When “Save settings and check connection. Press ENTER to continue.” appears, press ENTER.

It may take a while for the unit to complete the network settings.
When the network settings have been completed, “Complete.” appears and lights up on the display.
If you are making the initial settings, the “Date&Time” display, step 5 of “Performing initial setup operations,” appears. Go back to page 22 and continue the initial setting process.

8 Make the server settings.

To listen to audio content stored on the server through the network that you have set up in this section, you need to set up your server (page 38).

Setting up a wireless network using the WPS PIN code method

If the access point supports the WPS PIN (Personal Identification Number) code connection, you can set up a WPS wireless connection by entering the unit’s PIN code into the wireless LAN router/access point.

1 Press SETTINGS to enter the settings menu and select “Network Settings.”

2 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select “Connection Method.”

The “Connection” display appears.
If you are performing the initial setup operation and indicated that you want to set the network connection (page 21), this display appears.

4 Select “Wireless LAN.”

5 Select “Manual Registration” - “WPS PIN.”

The unit’s PIN code (8 digits) is displayed. Leave the PIN code displayed on the unit until the connection is completed. (A different PIN code will be displayed each time you perform this operation.)

6 Input the unit’s PIN code into the wireless LAN router/access point.

For details on entering the PIN code, refer to the operating manual of the wireless LAN router/access point.

7 Press ENTER.

“Exchanging WPS info...” appears on the display.
When the wireless LAN router/access point has been registered with the unit, “Access point registration is complete.” appears.
It may take a while for the unit to complete the network settings.

8 When “Save settings and check connection. Press ENTER to continue.” appears, press ENTER.

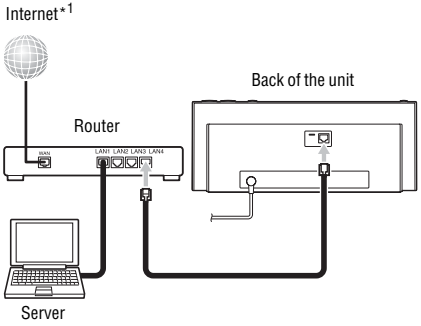
It may take a while for the unit to complete the network settings.
When the network settings have been completed, “Complete.” appears and lights up on the display.
If you are making the initial settings, the “Date&Time” display, step 5 of “Performing initial setup operations,” appears. Go back to page 22 and continue the initial setting process.

9 Make the server settings.

To listen to audio content stored on the server through the network that you have set up in this section, you need to set up your server (page 38).

Setting up a wired network

Read the following first



*1 To listen to the music services, you need an environment that can access to the Internet.

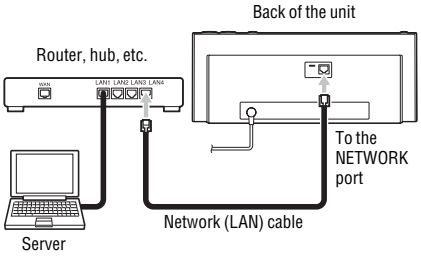
You need the following environment to use the Home Network, Music Services, and PARTY STREAMING functions. Confirm your environment in advance.

- ❑ **A wired LAN home network environment must be available. (Make sure that a router is used.)**
- ❑ **A device that can be used as a server (a computer, etc.) must be connected to your wired LAN home network.*2**
- ❑ **Internet access must be available. (When you want to listen to music services or use an NTP server to set the clock.)**

*2 For details on servers which are compatible with this unit, see page 38.

Make sure to use a network (LAN) cable for a wired connection.

1 Connect the unit to a device that is connected to the server.



The connection configuration depends on the environment of your home network.

- When the server (a computer, etc.) is connected to a router or a hub:
  - → If an unused port is available on the router or on the hub, connect the unit to that port.
  - → If an unused port is not available on the router, add a hub and connect the server and the unit to the hub.
- When a router is not used*:
  - → Add a router and connect the server device and the unit to the router.

* For example, when a server (a computer, etc.) is connected directly to a modem which does not have a router function.

2 Press SETTINGS to enter the settings menu and select “Network Settings.”

3 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

4 Select “Connection Method.”

The “Connection” display appears.
If you are performing the initial setup operation and indicated that you want to set the network connection (page 21), this display appears.

5 Select “Wired LAN.”

The unit automatically starts setting up the network connection.

6 When “Save settings and check connection. Press ENTER to continue.” appears, press ENTER.

It may take a while for the unit to complete the network settings.
When the network settings have been completed, “Complete.” appears.
If you are making the initial settings, the “Date&Time” display, step 5 of “Performing initial setup operations,” appears. Go back to page 22 and continue the initial setting process.

7 Make the server settings.

To listen to audio content stored on the server through the network that you have set up in this section, you need to set up your server (page 38).

Setting up the IP address/ proxy server

You may have to use a fixed IP address and proxy server, depending on your home network settings, or the specifications of the Internet service provider.
For details on the input values in the following procedures, refer to the operating manual of the respective device or the information provided by your Internet service provider.

To use a fixed IP address

The unit is set to obtain the IP address automatically as the factory setting, however, you can use a fixed IP address, depending on your network settings.

1 Press SETTINGS to enter the settings menu and select “Network Settings.”

2 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select “Tools” - “Advanced Settings.”

4 Select “IP Address Settings” - “Manual.”

5 Enter the values for “IP Address,” “Subnet Mask” and “Default Gateway.”

When you press ENTER after you enter “Default Gateway,” the DNS server settings display appears.
For details on how to input characters, see “Entering text” (page 19).

6 Enter the values for the “Primary DNS” setting.

7 When “Set Second. DNS?” appears, select “Yes.”

If you do not have to set the secondary DNS server setting, select “No.”

8 Enter the values for the “Secondary DNS” setting, and then press ENTER.

9 When “Save settings and check connection. Press ENTER to continue.” appears, press ENTER.

When the network settings have been completed, “Complete.” appears.

Tip

If you want to obtain the IP address automatically using DHCP, select “Auto” for the “IP Address Settings” in step 4. If you select “Auto” in step 4, the “DNS Settings” selection display appears afterwards. In this case, select “Auto” or “Manual” for “DNS Settings” and enter the respective values following the instructions that appear on the display.

To use a proxy server

If you need to use a proxy server (for example, when you are instructed to use a proxy server by your Internet service provider), be sure to prepare the proxy address and the port number in advance.

1 Press SETTINGS to enter the settings menu and select “Network Settings.”

2 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select “Tools” - “Advanced Settings.”

4 Select “Proxy Settings” - “Use.”

5 Enter the values for “Proxy Address” and “Proxy Port.”

When you enter the proxy address, press ENTER so that the “Proxy Port” display appears. Enter the proxy port number.
For details on how to input characters, see “Entering text” (page 19).

6 When “Save settings and check connection. Press ENTER to continue.” appears, press ENTER.

When the network settings have been completed, “Complete.” appears.

Confirming the network settings

You can confirm the network status and settings.

1 Press SETTINGS to enter the settings menu and select “Network Settings.”

2 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select “Tools” - “Connection Diagnosis.”

Connection status appears as “Result:.”

4 Select the item you want to check.

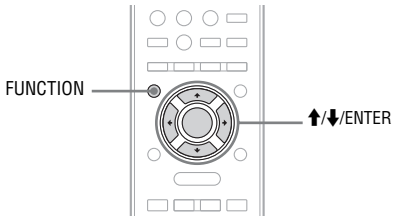
You can select from “Connection Method,” “SSID*,” “Signal Strength*,” “Security Method*,” “IP Address” (“IP Address,” “Subnet Mask,” and “Default Gateway”), “DNS” (“Primary DNS” and “Secondary DNS”) and “Proxy Server” (“Address” and “Port”).

* Appears only when a wireless network is being used.

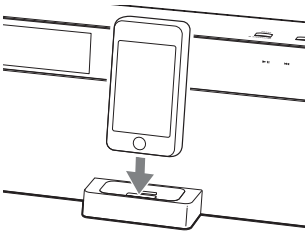
When an error has occurred, “!” appears next to the error item.

Listening to an iPod or iPhone

You can operate your iPod/iPhone with the remote control and listen to audio content stored on your iPod/iPhone. See “Compatible iPod/iPhone models” (page 73) for iPod/iPhone models that can be connected to this unit.



1 Place the iPod or iPhone on the iPod/iPhone dock.



2 Press FUNCTION repeatedly to select the iPod & iPhone function.

3 Select a track by browsing through the various iPod/iPhone content lists on either the display of the unit or of the iPod/iPhone.

- When “Remote UI Mode” is set to “Off”: Operate the iPod/iPhone directly, browsing the items on the iPod/iPhone display.
- When “Remote UI Mode” is set to “On”: Operate the iPod/iPhone with the remote control of the unit or the main unit, browsing the items on the display of the unit.

For details on “Remote UI Mode,” see page 34.

Example: Selecting a track from “Playlists” when “Remote UI Mode” is set to “On”

① Press ↑/↓ to select [Playlists] from the iPod/iPhone content list, and then press ENTER.

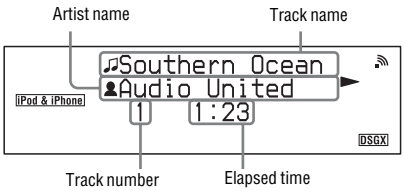
If the iPod/iPhone content list is not displayed, press BACK repeatedly until the first level of the iPod/iPhone content list tree is displayed, then select the item.

② Press ↑/↓ to select the desired playlist, and then press ENTER.

Tracks in the selected playlist appear.

③ Press ↑/↓ to select the desired track, and then press ENTER.

The selected track starts playback.



Tip

If “Network Standby” is set to “On,” the track that was playing when the unit was last turned off will start playing again when the unit is turned on again (only if the iPod/iPhone was not removed from the iPod/iPhone dock of the unit). The “Network Standby” mode is set to “Off” as the factory setting. To save the information on the last track played even when the unit is turned off, change the “Network Standby” mode to “On.” For details on the network standby mode setting, see page 18.

Notes

- The cover art and released year cannot be displayed on the unit.
- The unit does not save the information on the last track played if one of the following operations is carried out.
  - The power cord is disconnected from the wall outlet.
  - The iPod/iPhone is removed from the unit.
  - The unit is turned off and enters the network standby - off mode.
  - The play mode was set to a mode other than "Normal" when the unit was last turned off.
  - "Remote UI Mode" is changed.

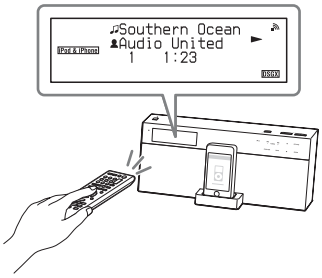
Other operations

To	Do the following
Pause playback	Press ❚❚. Press ❚❚ or ► to resume playback.
Scroll up/down the iPod/iPhone content lists	Press and hold ↑/↓. When "Remote UI Mode" is set to "Off," you can scroll up or down the iPod/iPhone content lists much like the Click Wheel operations or the drag up or down operations of the iPod/iPhone. When "Remote UI Mode" is set to "On," the currently selected item number and the total number of items in a list appear on the display and you can scroll the iPod/iPhone content list rapidly.
Choose the selected item	Press ENTER. You can choose the selected item much like the center button or the touch operation of the iPod/iPhone.
Find the beginning of the previous/next track	Press I◄◄ /►►I.
Find a point in a track	Press and hold ◄◄/►► (I◄◄ /►►I on the main unit) while playing, and release it at the desired point.
Return to the previous menu or reselect a menu while playing	Press BACK or iPod MENU. You can return to the previous menu or reselect a menu much like using the Menu button or the touch operation of the iPod/iPhone. To go back to the playback display, press OPTIONS and select "Now Playing" (only when "Remote UI Mode" is set to "On").
Adjust the volume	Press VOLUME +/–.
View various information while the unit is playing a track (only when "Remote UI Mode" is set to "On")	Press DISPLAY repeatedly. You can view the artist name, the album name, and the clock sequentially.

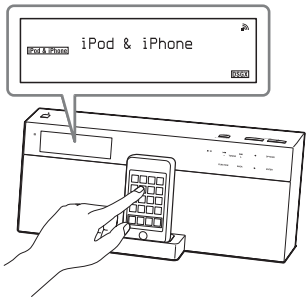
Selecting the operation mode

The unit has two operation modes for the iPod & iPhone function, remote UI mode - on and remote UI mode - off.

- **Remote UI mode - on:**
  You can operate your iPod/iPhone with the buttons on the unit and the remote control. iPod/iPhone content lists are also displayed on the unit.
  With the remote UI mode - on state, a play mode that has been set on the iPod/iPhone will be in effect when it is placed on the iPod/iPhone dock of the unit. A play mode set while the iPod/iPhone is placed on this unit will also be in effect when the iPod/iPhone is removed from the iPod/iPhone dock.



- **Remote UI mode - off (factory setting):** You can use the buttons and controls on your iPod/iPhone to operate it. You can also use some buttons on the unit and the remote control, but the iPod/iPhone content lists are not displayed on the unit.



Note

You cannot use the buttons and controls on your iPod/iPhone in the remote UI mode - on mode.

To change the operation mode, do the following.

1 While the iPod & iPhone function is selected, press OPTIONS to enter the options menu.

2 Select “Remote UI Mode.”

3 Select “On” or “Off” (◆).

(◆: Factory setting)

To use the unit as a battery charger

You can use the unit as a battery charger for an iPod/iPhone. The charging begins when the iPod/iPhone is placed on the iPod/iPhone dock. An iPod/iPhone can be charged when:

- the unit is turned on.
- the unit is turned off (in standby status) in the network standby - on mode.

To stop charging the iPod/iPhone

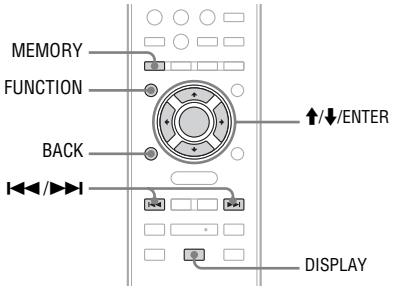
Remove the iPod/iPhone from the unit.

Notes

- An iPod/iPhone cannot be charged when the unit is turned off (in standby status) and in the network standby - off mode. For details on the charging status, refer to the operating manual of your iPod/iPhone. Charging is possible while the power cord of the unit is connected to a wall outlet.
- When placing or removing the iPod/iPhone, handle the iPod/iPhone at the same angle as that of the iPod/iPhone connector on the unit and do not twist or turn the iPod/iPhone to prevent connector damage.
- Do not carry the unit with an iPod/iPhone set on the iPod/iPhone dock. Doing so may cause a malfunction.
- When placing or removing the iPod/iPhone, brace the unit with one hand and take care not to press the controls of the iPod/iPhone by mistake.
- To change the volume level, use the VOLUME +/– button on the unit or the remote control. The volume level does not change when adjusted on the iPod/iPhone.
- The iPod/iPhone dock on the unit is designed for an iPod/iPhone only. You cannot connect any other portable audio players.
- To use an iPod/iPhone, refer to the operating manual of your iPod/iPhone.
- Sony cannot accept responsibility in the event that data recorded on the iPod/iPhone is lost or damaged when using an iPod/iPhone with this unit.
- If the album shuffle mode is set on the iPod/iPhone, “SHUF” lights up on the display when you connect the iPod/iPhone to the unit. If the album shuffle repeat mode is set on the iPod/iPhone, “SHUF” and “REP” light up on the display. (Note that this happens only when “Remote UI Mode” is set to “On.”) For details on the play mode of the unit, see page 48.
- When the album shuffle mode or album shuffle repeat mode is set on the iPod/iPhone, the shuffle mode remains active but the unit does not shuffle tracks after you set the iPod/iPhone on the unit. If you want to shuffle tracks, set the play mode of the iPod/iPhone to shuffle or shuffle repeat mode.

Listening to DAB/DAB+ (available for the UK model only)

You can tune in DAB/DAB+ stations. Presetting stations in advance allows you to recall them by number.
DAB/DAB+ stations can be received with the UK model only.



Performing a DAB/DAB+ Initial Scan

When you select the DAB/DAB+ function for the first time after purchase, the unit automatically starts a DAB/DAB+ Initial Scan and obtains a DAB/DAB+ service component list. However, you can perform a DAB/DAB+ Initial Scan manually.

1 Press FUNCTION repeatedly to select the DAB/DAB+ function.

"DAB" lights up on the display.

2 When "Start Initial Scan? Press ENTER." appears, press ENTER.

The DAB/DAB+ Initial Scan starts. When scanning is completed, a service component list (a list of available DAB/DAB+ stations) is created.

Tip

You can perform the Initial Scan manually. Press OPTIONS and select "Initial Scan." When "Start Initial Scan? Press ENTER." appears, press ENTER.

Notes

- All preset stations that have been stored in the unit are cleared when you perform a DAB/DAB+ Initial Scan or when scanning is cancelled.
- Before unplugging the DAB/DAB+ wire antenna (aerial), make sure the unit is turned off to preserve your own DAB/DAB+ settings.

Tuning in a DAB/DAB+ station

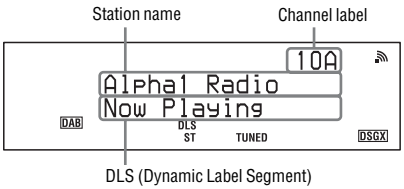
1 Be sure that the DAB/DAB+ Initial Scan has been performed and a service component list has been created.

2 Press FUNCTION repeatedly to select the DAB/DAB+ function.

"DAB" lights up on the display.

3 Press I◄◄/►►I.

The unit tunes in to the previous or the next DAB/DAB+ station on the service component list.



Press DISPLAY repeatedly to view information such as ensemble label or frequency of the current station.
Press BACK to return to the service component list.

Tip

For better broadcast reception, try changing the direction or location of the antenna (aerial). For example, position the antenna near or outside a window. If the reception does not improve, it is recommended that you connect an optional external antenna. Keep the DAB/DAB+ antenna away from the power cord, remote control, or AC adaptor, to avoid picking up noise.

Notes

- When tuning in a DAB/DAB+ station, it may take a few seconds before you hear any sound.
- When tuning in a DAB/DAB+ station, primary service is automatically received when secondary service ends.

Other operations

To	Do the following
Select different services	Press I◄◄ /►►I repeatedly to select the desired service.
	Press BACK to display the service component list, press ↑/↓ to select the desired service, and then press ENTER. Press and hold ↑/↓ so that the currently selected item number and the total number of items in a list appear on the display and you can scroll the list rapidly.
Select the tuning mode	Press BACK repeatedly until the "Tuning Mode" display appears, and then select "All Services" or "Preset."*
Go back to the DAB/DAB+ reception display from a list display	Press OPTIONS and select "Now Playing."

* A service component list or a list of preset stations appears on the display. Primary services that have been obtained by the DAB/DAB+ initial scan appear in the service component list, and the stations that have been preset appear in the list of preset stations.

Presetting DAB/DAB+ stations

By presetting DAB/DAB+ stations, you can easily reselect them by using the corresponding preset number. You can preset up to 20 DAB/DAB+ stations.

1 Tune in the desired DAB/DAB+ station.

2 Press MEMORY.
A list of "Preset Memory" appears.

3 Press ↑/↓ to select a preset number.

4 Press ENTER.
To preset another service, repeat the procedure from step 1.

Tips

- Secondary services can also be preset.
- You can preset the station using the options menu. With the desired station tuned in, press OPTIONS and select "Preset Memory," press ↑/↓ to select a preset number, and then press ENTER to enter the station.

To listen to a preset DAB/DAB+ station

1 Press FUNCTION repeatedly to select the DAB/DAB+ function.
The unit automatically starts playing the station that have received the last time.

2 Press BACK repeatedly until the "Tuning Mode" display appears.

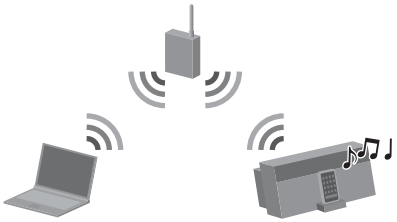
3 Select "Preset," then select the desired preset station.

Tip

You can press the numeric button that corresponds with the preset number to select the preset station directly.

Listening to audio content stored on a server

This unit can play audio content that is stored on a server device (such as a computer) that supports the DLNA (Digital Living Network Alliance) standards.



To listen to audio content stored on a server

- **First of all, you need to connect the unit to your home network.**
  → See "Connecting the unit to your home network (network settings)" (page 25)
- **When you connect the unit to a home network, you need to set up the server.**
  → See "Setting up the server" (page 38)

About DLNA

DLNA is an abbreviation for Digital Living Network Alliance. It is the name of an organization that establishes guidelines (DLNA guidelines), and it is also the name of the method that allows devices in a house to share digital content (such as music data, image data, etc.) over a home network.

Setting up the server

To enjoy listening to audio content stored on your server with this unit, you must set up the server in advance.
The following server devices are compatible with this unit.

- Sony VAIO Media plus 2.0
- Sony NAS-S500HDE, NAS-S55HDE* HDD Network Audio System
- Microsoft Windows Media Player 12 installed on Windows 7 (page 38)
- Microsoft Windows Media Player 11 installed on Windows Vista/XP (page 40)

* These models may not be available in some countries/areas.

If the server has a function that limits access from other devices, you must change the setting on the server to allow the unit to access the server.
This section explains how to set up Windows Media Player when using it as a server.
For details on the settings of other server devices, refer to the operating manuals or help of the respective devices or applications.

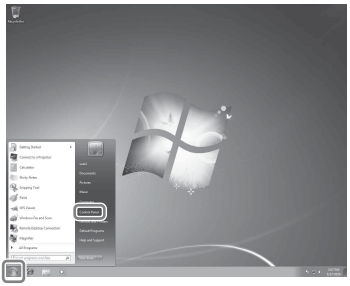
Note

The items displayed on the computer may be different from the ones shown in this section, depending on the version of the operating system or the computer environment. For details, refer to the help of your operating system.

■ When using a computer equipped with Windows 7

This section explains how to set up a manufacturer-installed version of Windows Media Player 12 for Windows 7 as a server to connect with this unit.
For details on how to operate Windows Media Player 12, refer to the help of Windows Media Player 12.

1 Go to [Start] - [Control Panel].

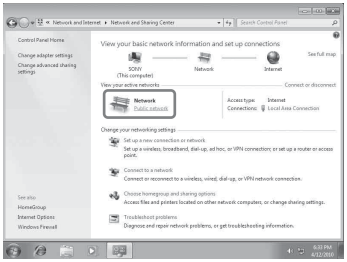


2 Select [View network status and tasks] under [Network and Internet].
The [Network and Sharing Center] window appears.

Tip

If the desired item does not appear in the computer display, try to change the display type used by the Control Panel.

3 Select [Public network] under [View your active networks].
If it shows other than [Public network], go to step 6.

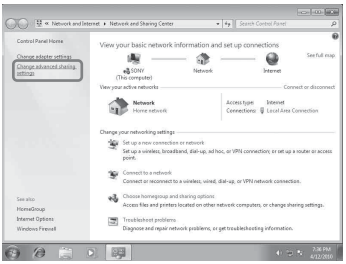


The [Set Network Location] window appears.

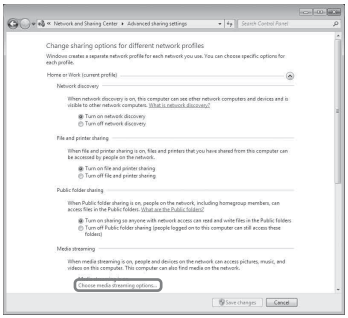
4 Select [Home network] or [Work network] according to the environment in which the unit is being used.

5 Follow the instructions that appear on the computer display according to the environment in which the unit is being used.
When the settings have been completed, confirm that the item under [View your active networks] has been changed to [Home network] or [Work network] in the [Network and Sharing Center] window.

6 Select [Change advanced sharing settings].



7 Select [Choose media streaming options...] from [Media streaming].



8 If [Media streaming is not turned on] appears in the Media streaming options window, select [Turn on media streaming].

9 Select [Allow All].
The [Allow All Media Devices] window opens. If all the devices in the local network are set to [Allowed], select [OK] and close the window.

10 Select [Allow all computers and media devices].

11 Select [OK] to close the window.

12 Connect the unit to the server.

After you finish setting up Windows Media Player 12, refresh the server list of the unit and select this server from the server list. For details on selecting a server, see “To refresh the server list” (page 43).

■ When using a computer equipped with Windows Vista/ Windows XP

This section explains how to set up Windows Media Player 11 installed on Windows Vista/ Windows XP*, as a server to connect with this unit.

For details on how to operate Windows Media Player 11, refer to the help of Windows Media Player 11.

* Windows Media Player 11 is not manufacturer-installed on Windows XP. Access the Microsoft web site, download the installer, and then install Windows Media Player 11 on your computer.

1 Go to [Start] - [All Programs].

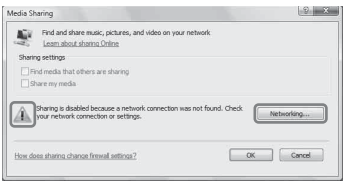
2 Select [Windows Media Player].

Windows Media Player 11 starts up.

3 Select [Media Sharing...] from the [Library] menu.

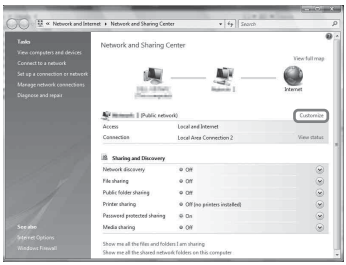
If you are using Windows XP, go to step 9.

4 When ⚠ is displayed, select [Networking...].


Media Sharing
Find and share music, pictures, and video on your network
Learn about sharing Online
Sharing settings
Find media that others are sharing
Share my media
Sharing is disabled because a network connection was not found. Check your network connection or settings.
Networking...
How does sharing change firewall settings?
OK
Cancel

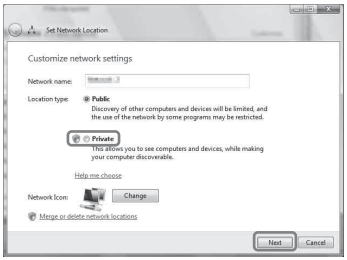
The [Network and Sharing Center] window appears.

5 Select [Customize].



The [Set Network Location] window appears.

6 Add a check mark to [Private] and select [Next].


Set Network Location
Customize network settings
Network name:
Location type:
Public
Discovery of other computers and devices will be limited, and the use of the network by some programs may be restricted.
Private
This allows you to see computers and devices, while making your computer discoverable.
Help me choose
Network icon:
Change
Merge or delete network locations
Next
Cancel

7 Confirm that the [Location type] has been changed to [Private] and select [Close].

8 Confirm that [(Private network)] is displayed in the [Network and Sharing Center] window and close the window.

9 If a check is not added next to [Share my media] in the [Media Sharing] window that is displayed in step 3, add a check mark to [Share my media], then select [OK].

A list of connectable devices is displayed.

Media Sharing
Find and share music, pictures, and video on your network
Learn about sharing Online
Sharing settings
Find media that others are sharing
Share my media
Your network (Network 2) is a private network. Devices that you allow can find your shared media.
Networking...
How does sharing change firewall settings?
OK
Cancel

10 Select [Settings...] that appears beside [Share my media to:].

11 Add a check mark to [Allow new devices and computers automatically] and select [OK].

Note

Uncheck this item after you confirm that the unit can connect to the server and play audio data on the server in step 12.

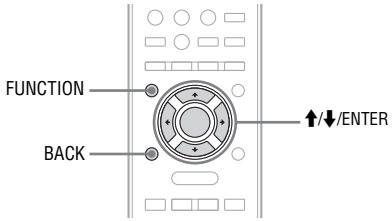
12 Connect the unit to the server.

After you finish setting up Windows Media Player 11, refresh the server list of the unit and select this server from the server list. For details on selecting a server, see "To refresh the server list" (page 43).

Playing audio content stored on a server

The unit can play audio content stored on the server in the MP3, LinearPCM, WMA, AAC* and HE-AAC formats. Audio content with copyright protection (Digital Rights Management) cannot be played by this unit.

* The unit can play AAC files with the extension of ".m4a" only.



1 Press FUNCTION repeatedly to select the Home Network function.

2 Select the server to be connected.

When the server list appears, press ↑/↓ to select the server.
If the server list does not appear, follow the procedure outlined in "To refresh the server list" (page 43) to find the server.

Note

Even if the power of the server device on the server list has been turned off, the unit turns the server on automatically if the server supports the Wake-on-LAN standard. If the server does not support the Wake-on-LAN standard, turn on the server in advance. For details on settings or operations of Wake-on-LAN of your server, refer to the operating manual or help of your server.

3 Select the item you want to play.

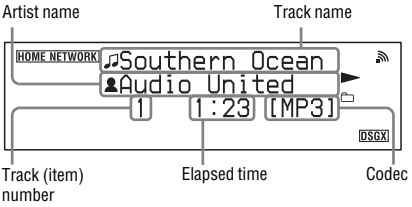
The items that are displayed (tracks, artists, albums, genres, folder name, etc.) depend on the connected server.

- Press ↑/↓ to select the item.
- Press and hold ↑/↓ so that the currently selected item number and the total number of items in a list appear on the display and you can scroll the list rapidly.

- Press BACK to go to the next higher directory.
- Press ENTER to go to the next lower directory.

4 Select the track you want to play and press ENTER.

The unit starts playing the selected track and the playback display appears.
Make sure that there is sound output from the speakers of the main unit.



Tips

- If you select a folder (such as an artist folder, genre folder, etc.) and press the ► button, the unit plays all items in the selected folder.
- The track on the server that was playing when the unit was last turned off will start playing again when the unit is turned on again (only if the power cord of the unit was not disconnected from the wall outlet).

Notes

- Tracks that the unit cannot play appear on the display as well. You cannot sort a list of playable tracks. Tracks that cannot be played on the unit are skipped during playback.
- If you disconnect the power cord from the wall outlet, any information on the track on the server that was playing when the unit was last turned off will be erased.
- It may take a while for the display to change while the unit is searching for an item in a folder that contains a large amount of audio content. When you search for an item in a folder that has large amount of audio content, you can search for an item using a keyword (page 49).

Other operations

To	Do the following
Pause playback	Press ❚❚ during playback. Press ► to resume playback.
Stop playback	Press ■.
Find a point in a track	Press and hold ◄◄/►► (I◄◄ /►►I on the main unit) during playback and release it at the desired point.
Find the beginning of the previous/next track	Press I◄◄ /►►I repeatedly.
Reselect the item you want to play	Press BACK repeatedly until the desired directory appears. Or press OPTIONS, select "To Server Top," and then select the item. To go back to the playback display, press OPTIONS and select "Now Playing."
Change the playback range*1*2	Press OPTIONS and select "Playback Range." You can select the playback range from "Current Folder" (factory setting) or "Parent Folder." When one of these playback range settings is selected, 🗀 lights up on the display.
Check the details of the selected item	Press OPTIONS and select "Information." You can see the detailed information of the selected item (content, folder, server, etc.).
View various information while the playback display appears*3	Press DISPLAY repeatedly. You can check the album name and the clock.

*1 If you change the playback range while the unit is playing a track, the playback will stop once when you select the playback range, then start playing the same track again from the beginning.

*2 When you set "Playback Range" to "Current Folder" or "Parent Folder," the unit plays audio content as follows.

- When you select "Current Folder," the unit plays tracks in the current folder.
- When you select "Parent Folder," the unit plays:
  - tracks in the parent folder.
  - tracks in folders contained in the parent folder.

The term "parent folder" used in this section means a folder one level higher in the structure tree than the folder that contains the currently selected item.

*3 You can view this information both when the unit is stopped and when it is playing a track, unless a list of items is displayed.

To refresh the server list

If you cannot find the desired server in the server list (such as when you add a new server on the network but it does not appear on the server list, or when the server you normally use does not appear in the server list), refresh the server list.

1 Press FUNCTION repeatedly to select the Home Network function.

If the unit automatically connects to the server that it was connected to the last time, press BACK repeatedly until the server list appears.

2 While the unit is displaying the server list, press OPTIONS to enter the options menu and select “Refresh.”

“Scanning...” appears on the display and the unit searches for new servers. When the server list has been refreshed, a new server list appears.

Tip

The unit keeps a history of the last five connected servers and these servers appear under the servers that are currently activated in the server list.
20 servers can be displayed in a server list. When the number of servers on the server list exceeds 20, the unit automatically deletes servers, starting from the oldest server. However, you can select and delete a server manually.

To delete a server from the server list

You can delete non-operating or unrecognizable servers from the server list.

1 Select the server you want to delete from the server list.

2 Press OPTIONS to enter the options menu and select “Delete.”

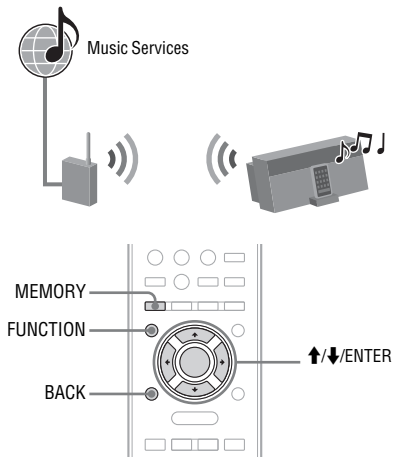
3 Select “OK.”

Notes

- You cannot delete the server of which audio content is currently being played back by the unit. If you try to delete such a server, a message that requires you to stop playing the track appears on the display.
- Even if you delete the server from the server list, the server will appear in the list again when the unit finds it on the network (such as when you refresh the server list).

Listening to music services

You can listen to music services offered on the Internet with this unit (Music Services function). To use this function, the unit has to be connected to the network and the network has to be connected to the Internet. For details on setting up the network, see “Connecting the unit to your home network (network settings)” (page 25).
Refer to the following URL for details and further information on Music Services.
http://www.sony.net/audio/musicservices



The following steps introduce how to select “vTuner” as an example of music services offered on the Internet.

1 Press FUNCTION repeatedly to select the Music Services function.

A list of service providers that the unit can connect to appears.

2 Select “vTuner.”

3 Select the desired folder or station, then press ENTER.

- Press ↑/↓ to select the item.
- Press and hold ↑/↓ so that the currently selected item number and the total number of items in a list appear on the display and you can scroll the list rapidly.
- Press ENTER to go to the next lower directory or to listen to the station.
- Press BACK to go to the next higher directory.

Tip

The station that was playing when the unit is turned off will start playing again when the unit is turned on again (only if the power cord of the unit was not disconnected from the wall outlet).

Notes

- If “No Service” appears and you cannot obtain a list of service providers, press OPTIONS and select “Refresh Service List.”
- If the unit is turned off and you disconnect the power cord from the wall outlet, information on the station that was playing when the unit was last turned off will be erased.

Other operations

To	Do the following
Change the station or service	Press BACK to go back to the list of service providers and select the service again. To go back to the playback display again, press OPTIONS and select “Now Playing.”
Use various functions while the unit is selecting or playing a station or service	Press OPTIONS. The item displayed may vary according to the selected item or directory.
View various information while the unit is playing a station or service	Press DISPLAY repeatedly. You can view the artist name, the album name, and the clock sequentially.

To refresh the service list

If the unit cannot find the music services, refresh the service list.

1. Press SETTINGS to enter the settings menu and select “Music Services Settings.”
2. When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.
   When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.
3. Select “Refresh Service List.”
4. Select “OK.”

Presetting stations

By presetting desired stations, you can easily reselect them by using the corresponding preset number. You can preset up to 20 stations.
This operation can only be carried out when the unit is playing a station.

1. Play the desired station.
2. Press MEMORY.
   A list of “Preset Memory” appears.
3. Press ↑/↓ to select a preset number and press ENTER.
4. Repeat steps 1 to 3 to preset other stations.

To listen to the preset station

1. Press FUNCTION repeatedly to select the Music Services function.
   The unit automatically start playing the station that have received the last time.
2. Press BACK repeatedly until the list of service providers appears.
3. Select “Preset,” then select the desired preset station.

Tip

You can use the numeric buttons to select the preset station. Press the numeric button that corresponds to the preset number and press ENTER to select the preset station directly.

Note

There may be some stations that cannot be preset, depending on the service providers. If you try to preset such a station, “Not Available” appears on the display.

To delete the preset station

1. Select the station you want to delete from the list of preset stations.
2. Press OPTIONS to enter the options menu and select “Delete.”
3. Select “OK.”

Enjoying a variety of music services

You can enjoy listening to the content of a wide variety of music services offered on the Internet. Refer to the following URL for information on music services and how to listen to them with this unit.

Music Services Portal

http://www.sony.net/audio/musicservices

To check the registration code

You may be required to enter the registration code of the unit when you enjoy a new music service.

1. Press SETTINGS to enter the settings menu and select “Music Services Settings.”
2. When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

   When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.
3. Select “Registration Code.”

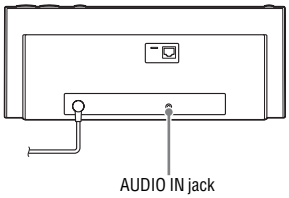
   The registration code of the unit appears on the display.

Listening to audio content from an external component (Audio In)

You can listen to the playback sound from an external component (such as a portable music player, etc.) connected to the AUDIO IN jack on the unit.
Use an audio connecting cable (optional) to connect the AUDIO IN jack on the unit and the audio output jack on the external component.
Make sure the audio connecting cable is firmly inserted into both jacks. If not, noise may be generated in the sound output.

1 Press VOLUME – to turn the volume down to its lowest level.

2 Connect an external component to the AUDIO IN jack on the unit using an audio connecting cable.



3 Press FUNCTION repeatedly to select the AUDIO IN function.

4 Start playback of the connected component and adjust its volume.

Playback sound is output from the speakers of this unit. For details on the operation of the connected component, refer to the operating manual of the connected component.

To adjust the input level

If the sound volume is too high or too low, you can change the input level on the unit according to the output level of the connected component.

1 While the AUDIO IN function is selected, press OPTIONS to enter the options menu and select “AUDIO IN Sensitivity.”

2 Select “Low(Line Out)” or “High(Headphone Out).”

Display	Description
◆ Low(Line Out)	When the unit is connected to the line out jack of the external component.
High(Headphone Out)	When the unit is connected to the headphone out jack of the external component.

(◆: Factory setting)

Note

When the volume from an external component is too low, set the input level to “High(Headphone Out).” When the volume is too high or the sound is distorted, set the input level to “Low(Line Out).” Use the volume adjustment control if the connected component has a volume adjustment function.

Changing the play mode

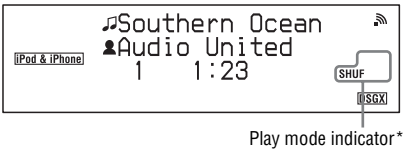
You can listen to tracks in random order (shuffle play) or one track repeatedly (repeat play). play mode can be changed with the iPod & iPhone function and the Home Network function only.

Notes

- The play mode that is set on the iPod/iPhone remains active after you place the iPod/iPhone on the unit. You can change the play mode with this unit. If you change the play mode on the unit, the play mode set on the unit remains active on the iPod/iPhone even after it is disconnected from the unit.
- If the album shuffle mode is set on the iPod/iPhone, "SHUF" lights up on the display when you connect the iPod/iPhone to the unit. If the album shuffle repeat mode is set on the iPod/iPhone, "SHUF" and "REP" light up on the display. (Note that this happens only when "Remote UI Mode" is set to "On.")
- When the album shuffle mode or album shuffle repeat mode is set on the iPod/iPhone, the shuffle mode remains active but the unit does not shuffle tracks after you set the iPod/iPhone on the unit. If you want to shuffle tracks, set the play mode of the iPod/iPhone to shuffle or shuffle repeat mode.

1 While the unit is stopped, press PLAY MODE repeatedly.

The play mode and the play mode indicators change as follows.



* When the iPod & iPhone function is selected, the play mode indicators light up on the display only when "Remote UI Mode" is set to "On."

Play mode/ indicator	Description
Normal/(none)	The unit plays all tracks for the selected playback range (artist, album, etc.) in sequential order.
Repeat/REP	The unit plays all tracks for the selected playback range (artist, album, etc.) repeatedly.
Repeat 1/REP 1	The unit plays the currently selected track repeatedly.
Shuffle*/SHUF	The unit plays the tracks for the selected playback range (artist, album, etc.) in random order.
Shuffle Repeat/ SHUF REP	The unit plays the tracks for the selected playback range (artist, album, etc.) in random order repeatedly.

* Shuffle play is not available for the Home Network function.

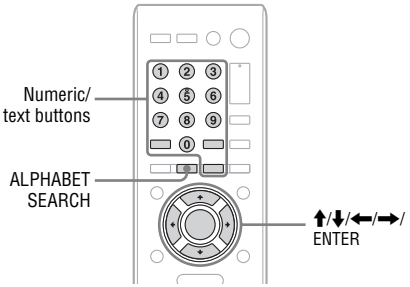
2 Press ►.

Playback starts with the selected play mode.

Searching for an item using a keyword

When a list of an item (such as an artist list, a track list, etc.) is displayed, you can enter a keyword to search for the desired item. This function can be used for the iPod & iPhone function*, the Home Network function, and the Music Services function.

* The alphabet search function can be used only when the "Remote UI Mode" for the iPod & iPhone function is set to "On."



1 When a list of an item (artist list, track list, etc.) is displayed, press ALPHABET SEARCH.

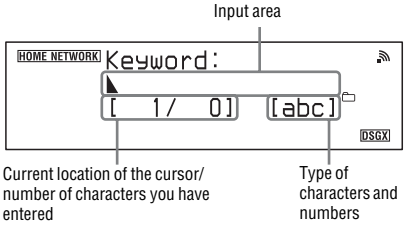
The keyword input display appears.

2 Enter a keyword.

Use the numeric/text buttons to enter a keyword. For details on entering characters, see "Entering text" (page 19).

Note

Enter a keyword that will match the letters or a word at the beginning of the name or title of the item you want to search for. When the unit searches for an item, "The" at the beginning of a name and the following space will be ignored.



3 When you finish entering the keyword, press ENTER.

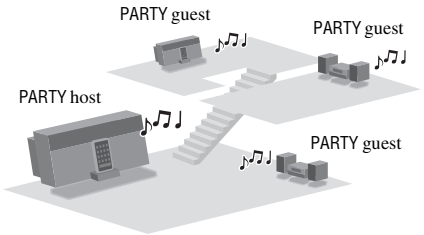
"Searching…" appears on the display. When the unit finishes searching, an item that matches the keyword appears. If the item displayed is not the one you are searching for, press ←/→ so that the display changes to the next item which matches the keyword. If "No Results" appears and there is no item that matches the keyword, press ←/→ to try to find the item you are searching for. Press ALPHABET SEARCH again to go back to the keyword input display.

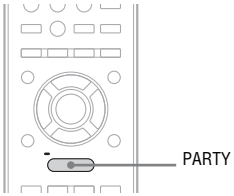
4 When you find the desired item, press ENTER.

Playback starts.

Using the PARTY STREAMING function

You can play back audio content that is being played back on this unit or on another device that has a PARTY STREAMING function at the same time, via your home network.
While using the PARTY STREAMING function, the device that starts a PARTY and streams the audio content is called the "PARTY host," and the device that joins a PARTY and plays the audio content streamed from the PARTY host is called a "PARTY guest."
Make sure that the "PARTY STREAMING" of the unit is set to "On" (page 57).





You can enjoy the PARTY STREAMING function with other devices that have this PARTY STREAMING logo (shown below).

PARTY STREAMING

Starting a PARTY

You can start a PARTY so that other devices which support the PARTY STREAMING function can play the same music even though they are in different rooms.

1 Make sure the PARTY guest devices are turned on and are in the status which allows them to join a PARTY.

2 Play the desired sound source.

Audio content played by the iPod & iPhone, DAB/DAB+ (UK model only), Home Network, Music Services, or Audio In function can be streamed.

3 Press and hold PARTY for a few seconds.

The unit starts PARTY STREAMING.

To close a PARTY

Press and hold PARTY for a few seconds.

Tip

If the PARTY button is pressed on a device that has a PARTY STREAMING function while the unit is playing a track, the unit will start a PARTY as the PARTY host and the other device will join a PARTY as the PARTY guest.

Joining a PARTY

The unit can join a PARTY which has been started by another device so that you can enjoy the same audio content as that being played in a different room.

When another device (PARTY host) is having a PARTY, press PARTY.

The unit joins the PARTY as a PARTY guest.

To leave a PARTY

Press PARTY.

Tips

- If the “Network Standby” mode of the unit is set to “On,” the unit turns on and joins the PARTY automatically when another device starts the PARTY.
- You can check the PARTY host information. Press OPTIONS and select “PARTY Host Info.”

Notes

- You cannot join a PARTY in the following cases:
  - you have a PARTY on this unit.
  - you have already joined another PARTY.
- If you press PARTY when no PARTY is being held, but a device that has a PARTY STREAMING function is playing, the device will be the PARTY host and the unit will join the PARTY as the PARTY guest.

Connecting the unit with other DLNA-compliant devices

This unit complies with the DLNA standard. You can enjoy listening to music in various ways by connecting the unit to other DLNA-compliant devices over your home network.
When using the unit together with other DLNA-compliant devices, the unit can perform three different roles, as a server, as a player, and as a renderer (network controlled player).

About DLNA

DLNA is an abbreviation for Digital Living Network Alliance. It is the name of an organization that establishes guidelines (DLNA guidelines), and it is also the name of the method that allows devices in a house to share digital content (such as music data, image data, etc.) over a home network.

■ Server

The unit can be accessed by a player and the audio content from the unit can be played back by the player. The unit can stream audio content to one player at a time.

About the status of the unit and the sound sources for audio streaming

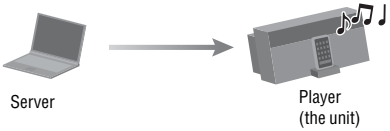
When the unit is used as a server, audio content from an iPod/iPhone, an external component (Audio In), or DAB/DAB+ (UK model only) can be streamed to a player while the unit is turned on or is in the network standby - on mode status. Audio can be streamed from the unit to a player when the unit is playing audio content or is stopped while the Home Network or Music Services function is selected.

Notes

- To play content from an iPod/iPhone or an AUDIO IN sound source on a player or renderer (network controlled player), select the Home Network function or Music Services function on this unit or turn the unit off after setting the Network Standby mode to “On.”
- The unit can stream audio content to one player at a time.
- If you select DAB/DAB+ as the sound source for audio streaming, primary services that have been obtained by the DAB/DAB+ initial scan and preset stations can be streamed to a player.

■ Player

The unit can access to a server and play the audio content stored on that server.
For details on the operation of the unit as a player, see “Listening to audio content stored on a server” (page 38).
The unit can access to one server at a time.

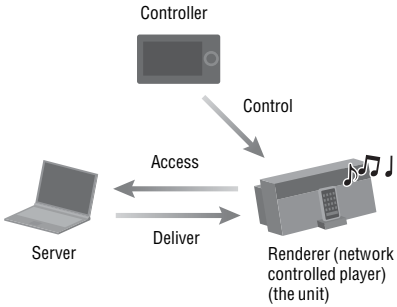


Note

If the server supports the Wake-on-LAN standard, the unit turns on the server automatically. It may be necessary to make the required settings so the server can be turned on via the network by Wake-on-LAN. For details on the settings required for Wake-on-LAN, refer to the operating manual of the server.

■ Renderer (network controlled player)

When a DLNA-compliant controller operates the unit, the unit performs the role of a renderer (network controlled player). In this case, the controller sends the unit commands to access a server and play audio content stored on the server.



This section explains how to enjoy music with DLNA-compliant devices on your home network, using some examples.

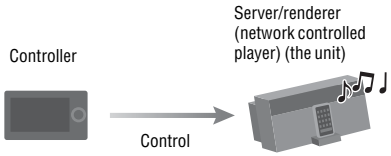
Note

The unit is set to allow all devices access to the unit automatically as the factory setting. You can select and register devices which can or cannot access this unit. For details, see “Setting up access permission” (page 55) and “Using lists of permitted and non-permitted devices” (page 55).

Playing audio content on the unit using a controller

You can use a DLNA controller to control the unit and to play audio content on the unit. To perform these operations, check the following first.

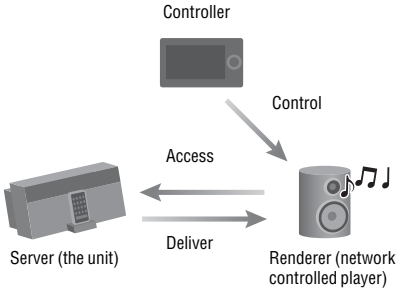
- Check that all devices are connected to your home network and set up correctly.
- Check that the unit is turned on or the unit is in the network standby - on mode.
- Check that the controller has been added to the “Permitted Devices” list of the unit.
- Check that the unit has been recognized and registered with the controller.



Streaming audio content to a renderer (network controlled player) using a controller

You can use a DLNA controller to control the unit to stream audio content to a renderer (network controlled player). Content from an iPod/iPhone, Audio In, or DAB/DAB+ (UK model only) can be streamed to a renderer (network controlled player). To perform these operations, check the following first.

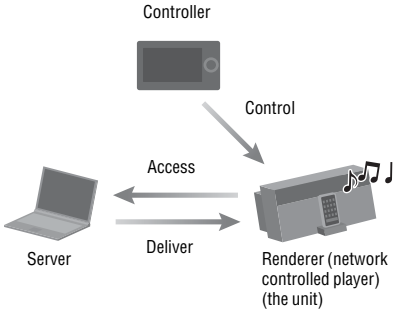
- Check that all devices are connected to your home network and set up correctly.
- Check that the unit and the renderer (network controlled player) are turned on or the unit and the renderer (network controlled player) are in the network standby - on mode.
- Check that the controller and the renderer (network controlled player) have been added to the “Permitted Devices” list of the unit.
- Check that the unit and the renderer (network controlled player) have been recognized and registered with the controller.



Playing audio content streamed from a server (such as a computer) using a controller

You can use a DLNA controller to stream audio content stored on a server (such as a computer) to the unit.

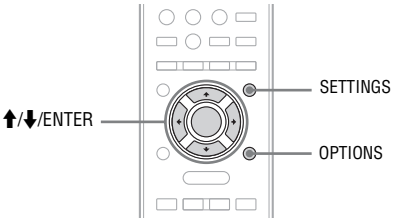
- Check that all devices are connected to your home network and set up correctly.
- Check that the unit and the server are turned on or the unit and the server are in the network standby - on mode.
- Check that the unit and the controller are allowed to access the server.
- Check that the unit and the server have been recognized and registered with the controller.



Tip

If you use Windows 7 as a server, you can use the [Play To] function of Windows 7 to listen to the audio content stored on the computer.

Setting up the functions related to network operations



Setting up access permission

When a new device is added on the network and accesses the unit, you can select whether the unit adds the device to the list of permitted devices automatically or manually. (For details on the list of permitted devices, see "Using lists of permitted and non-permitted devices" on page 55.)

1 Press SETTINGS to enter the settings menu and select "Optional Network Settings."

2 When "Playback and network functions cannot be used during the setup. Press ENTER to continue." appears, press ENTER.

When " ▾ " is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select "Access Permission Settings."

4 Select "Auto" or "Manual."

Display	Description
◆ Auto	When a new device accesses the unit, the unit automatically adds the device to the "Permitted Devices" list of the unit (page 55).
Manual	When a new device accesses the unit, the unit does not add the device to the list of permitted devices, but to the "Pending Devices" list of the unit (page 55).

(◆: Factory setting)

Note

Up to 20 devices can be added to the list of "Permitted Devices" or "Pending Devices." If 20 devices have already been registered, a new device cannot be added to either list. In this case, delete unnecessary devices or move devices from the lists (see "To edit a list" on page 56).

Using lists of permitted and non-permitted devices

The unit has two lists, a "Permitted Devices" list and a "Pending Devices" list, for the devices which are allowed to access the unit.

- **"Permitted Devices" list:**
  Devices allowed to access the unit are on this list.
  When the unit is used as a server, player devices which are registered in this list can access the unit.
- **"Pending Devices" list:**
  Devices not yet allowed to access the unit are on this list.

As “Access Permission Settings” is set to “Auto” (factory setting) (page 55), the unit adds new devices that have accessed the unit to the “Permitted Devices” list automatically. You can view each list and edit it. Up to 20 devices can be added to a list.

Note

If the server name cannot be found, “No Name” appears in the “Permitted Devices” list, the “Pending Devices” list, and “Model Name” for “Information” in the options menu.

To view a list

1. Press SETTINGS to enter the settings menu and select “Optional Network Settings.”
2. When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.
   When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.
3. Select “Access Control.”
4. Select “Permitted Devices” or “Pending Devices.”

To edit a list

You can view the details of the registered devices, and then delete them from the list.

1. While viewing either the “Permitted Devices” or “Pending Devices” list, select the device you want to edit.
2. Press OPTIONS to enter the options menu and select the desired item.

When the options menu for the “Permitted Devices” list is displayed:

Display	Description
Information	The “Model Name” and “MAC Address” of the selected device appear.
Delete	You can select from “Cancel” and “OK.” Select “OK” to delete the selected device.
Delete All	You can select from “Cancel” and “OK.” Select “OK” to delete all the devices on the list.

When the options menu for the “Pending Devices” list is displayed:

Display	Description
Information	The “Model Name” and “MAC Address” of the selected device appear.
Move	The selected device moves to the “Permitted Devices” list.
Delete	You can select from “Cancel” and “OK.” Select “OK” to delete the selected device.
Delete All	You can select from “Cancel” and “OK.” Select “OK” to delete all the devices on the list.

Using the SMART SELECT function

Setting “SMART SELECT” to “On” allows the applicable Sony controller SMART SELECT to find the unit as the target component by using the infrared function.

1. Press SETTINGS to enter the settings menu and select “Optional Network Settings.”
2. When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.
   When “ ▼ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select “SMART SELECT.”

4 Select “On” (◆) or “Off.”

(◆: Factory setting)

Setting the PARTY STREAMING function

You can set the unit to use the PARTY STREAMING function.

1 Press SETTINGS to enter the settings menu and select “Optional Network Settings.”

2 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

When “ ▾ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select “PARTY STREAMING.”

4 Select “On” or “Off.”

Display	Description
◆ On	The unit can be detected by other devices on the home network. The unit can start or close a PARTY, and join or leave a PARTY.
Off	The unit can be detected by other devices on the home network. However, the unit cannot start or join a PARTY.

(◆: Factory setting)

Naming the unit

You can name this unit so that the unit can be recognized by this name by other devices on the home network.

1 Press SETTINGS to enter the settings menu and select “Optional Network Settings.”

2 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

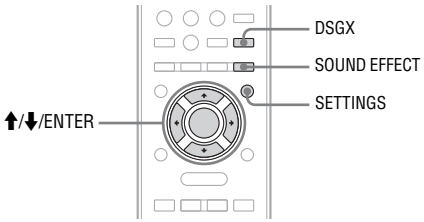
When “ ▾ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select “Device Name.”

4 Enter the name.

For details on how to enter text, see “Entering text” (page 19).

Changing the sound setting



Selecting a sound style

You can select a sound style from five preset equalizer settings to match the genre of the music.

Press SOUND EFFECT repeatedly.

Each time you press the button, the sound style changes as follows.

"Standard" (◆) → "Dynamic" → "Relax" → "Vivid" → "Live" → "Standard" → ...
(◆: Factory setting)

Generating a more dynamic sound (Dynamic Sound Generator X-tra)

You can reinforce the bass and the treble to create a more powerful sound. This function is set to "DSGX On" as the factory setting.

Press DSGX.

Each time you press the button, the DSGX function switches between "DSGX On" and "DSGX Off."

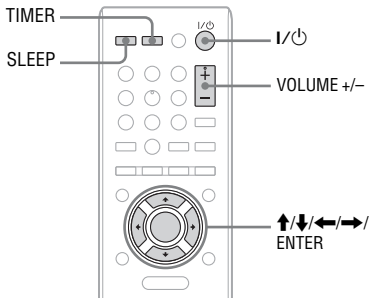
Turning the operating sound on or off

The operating sound for the operation buttons on the main unit is set to "On" as the factory setting. You can turn this sound on or off.

1 Press SETTINGS to enter the settings menu and select "Touch Key Settings" - "Beep Settings."

2 Select "On" (◆) or "Off."
(◆: Factory setting)

Using the timer



Using the Sleep Timer

You can set the Sleep Timer so that the unit enters standby mode automatically after a certain period of time (Sleep Timer function). This function operates even if the clock is not set.

1 Play the desired sound source.

2 Press SLEEP repeatedly.

Each time you press the button, the time interval changes as follows.

"SLEEP 15min" → "SLEEP 30min" → "SLEEP 60min" → "SLEEP 90min" → "SLEEP Off"(◆)
(◆: Factory setting)

The time interval display disappears if you do not operate the unit for 4 seconds, then the Sleep Timer is set.
While the unit is processing the selected time interval, the SLEEP indicator flashes slowly on the display. It keeps flashing until the unit enters the standby mode.
You can change the function (sound source, such as the iPod & iPhone function, the Home Network function, etc.) before the Sleep Timer turns the unit off.
After the selected time elapses, the unit enters standby mode automatically.

To check the remaining time before the Sleep Timer turns the unit off

Press SLEEP so that the remaining time before the Sleep Timer turns the unit off appears on the display.

Tip

If you set both the Sleep Timer and Play Timer at the same time, the Sleep Timer takes priority.

Note

If you perform the following operations before the Sleep Timer turns the unit off, the Sleep Timer resets.

- Disconnect the power cord.
- Update the system of the unit.
- Enter the settings menu and perform "All Reset."

Using the Play Timer

You can set the Play Timer to start playing an iPod/iPhone, a music service, or a DAB/DAB+ station (UK model only) at a specified time (Play Timer function). Make sure you have set the clock.

1 Prepare the sound source.

Select the sound source (iPod/iPhone, Music Services, or DAB/DAB+), and then press VOLUME +/– to adjust the volume.

2 Press TIMER.

3 When “TIMER Setting” appears, press ENTER.

The “Start Time” setting display appears, and the “🕘PLAY” indicator starts flashing rapidly.

4 Set the starting time.

Press ↑/↓ to change the hour and press →.
The cursor moves to the minute setting.
Perform the same operation to set the minute.
Press ←/→ to move the cursor.
Press and hold ↑/↓ to change the parameter sequentially.
After you set the minute, press ENTER. The “End Time” setting display appears.

5 Set the ending time.

Perform the same operation as that in step 4 to set the end time.

6 Select the source (“iPod & iPhone,” “MUSIC SERVICES,” or “DAB”*) you want to play.

When the Play Timer is set, “Complete.” appears, and the “🕘PLAY” indicator lights up on the display.

* UK model only

7 Press I/⏻ to enter the standby mode.

To go back to the previous display

Press BACK before you select the sound source in step 6.

To cancel the timer setting

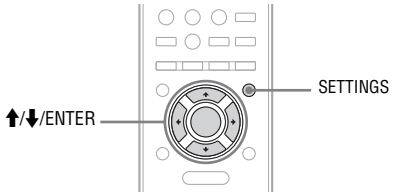
While the Play Timer is set, press TIMER. When “TIMER Off” appears on the display, press ENTER.

Notes

- The Play Timer is erased if you format the system (page 63).
- If the unit is already turned on at the preset starting time, the Play Timer will not be activated.
- The Play Timer may not be activated depending on the status of the connected iPod/iPhone.
- If you select the Music Services function as the sound source, the sound may not be output, depending on the service provider or the network environment.

Viewing the information of the unit

You can view the information of the unit.



1 Press SETTINGS to enter the settings menu and select “Device Details.”

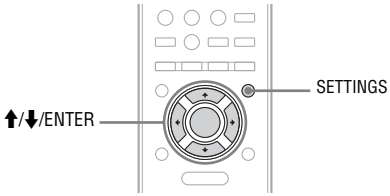
2 Select the item you want to view.

Display	Description
Model Name	This is the name that is set for this unit and is displayed on the server.
System Software	You can view the firmware version of this unit.
MAC Address(Wired LAN)	You can check the MAC address for the wired network of the unit.
MAC Address(Wireless LAN)	You can check the MAC address for the wireless network of the unit.

To go back to the previous display

Press BACK.

Managing the system



Updating the system application

By downloading the latest version of the system application, you can take advantage of the newest functions. The unit accesses the Sony server to update the system.
When a new update is available, you will be notified by a message that appears on the display while the unit is on and connected to the Internet. Make sure that the unit is stopped before updating the system.
For details on system update available, refer to the customer support site (page 64).

Notes

- Make sure not to turn off the unit or disconnect the network cable while the updating operation is in progress.
- If you try to update the system when the Sleep Timer is on, it will be changed to "Off" automatically.

1 Press SETTINGS to enter the settings menu and select "System Update."

2 When "Playback and network functions cannot be used during the setup. Press ENTER to continue." appears, press ENTER.

When " ▼ " is displayed, the message is continued to the next page. Press ↓ to see the entire text string.
The unit starts checking the available system update.

3 When "Found latest update. Press ENTER." appears, press ENTER.

If the update is not available, "No update required." appears.

4 When "System Update" display appears, select "OK."

A message that confirms whether or not you agree to the terms of the system update appears. Confirm the message and also read the "END-USER LICENSE AGREEMENT FOR SONY SOFTWARE" (page 80), and then select "Agree."

5 Follow the display instructions.

The unit starts to update the system application. It may take a while (about 20 minutes at the longest) for the unit to finish the update. The required time will depend on the amount of data in the updates, the line type of the network, the network communication environment, etc.
When the system update finishes, the unit restarts automatically.

To cancel the procedure

Select "Cancel" in step 4.

To go back to the previous display

Press BACK before the unit starts the system update.
You cannot go back to the previous display after the update starts.

Formatting the system

This function formats the unit and restores it to the condition it was at the time of purchase. Note that this process deletes all settings and information (e.g., clock setting, network settings).

1 Press SETTINGS to enter the settings menu and select “All Reset.”

2 When “Playback and network functions cannot be used during the setup. Press ENTER to continue.” appears, press ENTER.

When “ ▾ ” is displayed, the message is continued to the next page. Press ↓ to see the entire text string.

3 Select “OK.”

4 When “Are you sure?” appears, select “OK.”

Formatting starts.
The unit automatically restarts at the end of the procedure. When the unit finishes formatting, the initial setup display appears.

To cancel the procedure

Select “Cancel” in step 3 or 4.

To go back to the previous display

Press BACK before you select “OK” in step 4.

Troubleshooting

If a problem occurs while operating the unit, follow the steps described below before consulting your nearest Sony dealer. If an error message appears, it is recommended that you make a note of its contents for reference.

1 Check to see if the problem is listed in this “Troubleshooting” section.

2 Check the following customer support site.

- For customers in the USA: **http://www.esupport.sony.com/**
- For customers in Canada: English: **http://www.sony.ca/ElectronicsSupport/** French: **http://fr.sony.ca/ElectronicsSupport/**
- For customers in Europe: **http://support.sony-europe.com/**

You will find the latest support information and a FAQ at this web site.

3 If, after steps 1 and 2, you still cannot solve the problem, consult your nearest Sony dealer.

If the problem persists after doing all of the above, consult your nearest Sony dealer. When bringing the product in for repairs, be sure to bring in the entire system (main unit, remote control, AC adaptor, and power cord). This product is a system product, and so the entire system is needed to determine the section requiring repair.

How to reset the unit

It is usually unnecessary to reset this unit. However, on rare occasions, the unit enters an abnormal state and stops responding to button or on-screen operations. In this case, press and hold **I/⏻** (power) on the main unit for 10 seconds to reset the unit.

If the on/standby indicator flashes in red or amber

Immediately unplug the power cord, and check the following item.

- Is the iPod/iPhone connector short-circuited?

After the on/standby indicator stops flashing, reconnect the power cord, and turn on the unit. If the issue persists, contact your nearest Sony dealer.

Power

The unit does not turn on.

➡ Connect the AC adaptor to the unit and the power cord to a wall outlet firmly (page 15).

➡ The batteries in the remote control may be drained. Replace both batteries with new ones.

➡ The unit’s internal system may be malfunctioning, or the unit may be suffering from strong electrical noise caused by power supply abnormalities due to being dropped, excessive static electricity, or lightning. In this case, reset the unit (page 64). If the problem still persists, disconnect the power cord from the wall outlet, wait about 60 seconds, and then reconnect it.

The unit does not turn off.

➡ The unit’s internal system may be malfunctioning, or the unit may be suffering from strong electrical noise caused by power supply abnormalities due to being dropped, excessive static electricity, or lightning. In this case, reset the unit (page 64). If the problem still persists, disconnect the power cord from the wall outlet, wait about 60 seconds, and then reconnect it.

➡ The **I/⏻** (power) button may not respond while the unit is still starting up.

➡ The unit enters standby mode when you turn off the power. If you want to completely turn off the power, disconnect the power cord.

The on/standby indicator remains lit after you unplug the power cord.

➡ The on/standby indicator may not turn off immediately after you unplug the power cord. This is not a malfunction. The indicator will turn off after 30 seconds.

The clock is displayed after you turn the unit off.

➡ If the “Network Standby” mode is set to “On,” the clock is displayed when the unit is turned off.

Sound output

There is no sound.

➡ The volume may be minimized. Press VOLUME +/– buttons to adjust the volume.

➡ Check to make sure that the unit is not paused.

➡ Check the connections of the device connected to the unit. Check to make sure the proper function is selected.

➡ The specified station may have temporarily stopped broadcasting.

➡ If you select the Music Services function as the sound source, the sound may not be output, depending on the service provider or the network environment.

There is severe humming or noise in the sound.

➡ Move the audio connecting cable away from any display, fluorescent light, or other electrical devices.

➡ Move the unit away from any display or TV.

➡ If plugs or jacks are dirty, wipe them with a cloth slightly moistened with alcohol.

➡ Connect the unit to a different wall socket.

➡ Install a noise filter (available separately) to the power cord.

Network connection

An error message appears.

➡ Check the nature of the error. See “Messages” (page 69).

The unit cannot connect to the network.

➡ The network settings on the unit may be incorrect. Confirm the network status. Enter the settings menu and select “Network Settings” - “Tools” - “Connection Diagnosis” (page 32). For further information on the network connection, refer to the customer support site (page 64).

➡ When the unit is connected via a wireless network, move the unit and the wireless LAN router/access point closer to each other and perform the setup again.

➡ Check the settings of the router/wireless LAN router/access point and perform the setup again. For details on the settings of the devices, refer to the operating manual of the devices.

➡ Wireless networks are influenced by electromagnetic radiation emitted by microwave ovens and other devices. Move the unit away from these devices.

➡ Make sure that the router/wireless LAN router/access point is turned on.

➡ If you have reset the unit or have performed a system recovery on your server, make the network settings again (page 25).

iPod & iPhone

“Insert iPod or iPhone” appears.

➡ Make sure the iPod/iPhone is connected securely.

There is no sound.

➡ Make sure the iPod/iPhone is connected securely.

➡ Make sure the iPod/iPhone is playing music.

➡ Adjust the volume.

The sound is distorted.

➡ Turn down the volume.

➡ Set the sound style to “Standard” (page 58).

The unit does not display the content stored on the connected iPod/iPhone.

➡ “Remote UI Mode” may be set to “Off.” When this item is set to “Off,” the iPod/iPhone content does not appear on the display. Enter the options menu of the iPod & iPhone function and set “Remote UI Mode” to “On” (page 34).

The remote control does not function.

➡ Make sure the iPod/iPhone is updated with the latest software. If not, update the iPod/iPhone before using it with the unit.

➡ “Remote UI Mode” may be set to “Off.” When this item is set to “Off,” the iPod/iPhone content does not appear on the display. Enter the options menu of the iPod & iPhone function and set “Remote UI Mode” to “On” (page 34).

The iPod/iPhone cannot be charged.

- Make sure the iPod/iPhone is connected securely.
- You can use the unit as a battery charger for an iPod/iPhone when the unit is on or when "Network Standby" set to "On" (page 35).

"Remote UI Mode" is automatically set to "On" when an iPod/iPhone is connected to the iPod/iPhone dock of the unit.

- This may sometimes happen, depending on the iPod/iPhone model you are using.

"Remote UI Mode" cannot be set to "Off."

- This may sometimes happen, depending on the iPod/iPhone model you are using.

DAB/DAB+ (UK model only)

A DAB/DAB+ station cannot be received or there is a severe hum or other noise.

- Connect the antenna (aerial) correctly (page 15).
- Adjust the antenna position.
- Keep the antenna away from the power cord and the AC adaptor to avoid picking up noise.
- Turn off nearby electrical equipment.

A DAB/DAB+ station cannot be received.

- Check the antenna connection, then perform the DAB/DAB+ Initial Scan procedure (page 36).
- The current DAB/DAB+ station is not available. Select a different station (page 36).
- If you have moved to another area, some stations/frequencies may have changed and you may not be able to tune into your usual broadcast. Perform the DAB/DAB+ Initial Scan procedure to retune the radio stations (page 36). (Performing this procedure clears all previously stored presets.)

Home Network

The server (such as a computer) does not appear in the server list. ("No Server" appears.)

- Depending on the security software used on the computer, the computer may not appear in the server list of the unit. For details, refer to the help of the security software.
- You may have turned this unit on before you turned the server on. Enter the options menu and select "Refresh" in the server list display to refresh the server list (page 43).
- Make sure that the router/wireless LAN router/access point is turned on.
- Make sure that the server is turned on.
- Confirm that the server has been set correctly (page 38). Confirm that the unit has been registered with the server and is set to allow music streaming from the server.
- Confirm that the unit and the server are connected to the router/wireless LAN router/access point correctly. Enter the settings menu and select "Network Settings" - "Tools" - "Connection Diagnosis" (page 32). For further information on the network connection, refer to the customer support site (page 64).
- The server may be unstable. Restart it.
- If the ICF (Internet Connection Firewall) function is active on the computer, this may prevent the unit from connecting to the computer (only when your computer is used as a server). You may need to change the firewall settings to allow the unit to connect. (For details on changing the firewall settings, refer to the operating manual of your computer).

You cannot play audio data normally.

- Shuffle repeat play is selected. Set the play mode to normal (page 48).

The sound skips during playback.

- The bandwidth of your wireless LAN may be too low. Move the unit and the wireless LAN router/access point closer to each other, without any obstacles between them.
- When you are using your computer as a server, the computer may be running many applications. If anti-virus software is active on the computer, temporarily disable that software as it needs large amounts of system resources.
- Depending on the network environment or any radio interference, it may not be possible to play tracks with more than one device operating at one time. Turn off any other devices to enable the unit to play tracks.

"Cannot Play" appears.

- You cannot play any files other than audio files.
- Confirm that the server has been set correctly (page 38). Confirm that the unit has been registered with the server and is set to allow music streaming from the server.
- Check to confirm whether the audio file on the server is damaged or erased. Refer to the operating manual of the server.

➡ You cannot play the following tracks:
- A track that violates playback restrictions.
- A track with irregular copyright information.
- A track that you purchased at an online music store that does not allow home network streaming.
- A track in a format not supported by the unit (page 41).

➡ Confirm that the selected track has not been erased from the server. If the track has been erased, select another track.

➡ Make sure that the router/wireless LAN router/access point is turned on.

➡ Make sure that the server is turned on.

➡ The server may be unstable. Restart it.

➡ Confirm that the unit and the server are connected to the router/wireless LAN router/access point correctly.

"No Content" appears.

➡ If there are no tracks or folders in the selected folder, you cannot extend the folder to display its contents.

You cannot play a copyrighted WMA format track.

➡ Depending on the WMA file format, you may not be able to play some tracks.

You cannot select a previously selected track.

➡ The track information may have been changed on the server. Reselect the server in the server list (page 41).

The playback range cannot be changed.

➡ If the playback range has been set to "one track" for some reason, you cannot change the playback range using "Playback Range" in the options menu. In this case, reselect some other item from the content list.

Devices on the network cannot connect to the unit.

➡ "Network Standby" may be set to "Off." Turn on the unit or set "Network Standby" to "On" (page 18).

➡ Confirm that the network is correctly set up. If it is not, the connection cannot be made (page 32).

➡ The device has been added to the "Pending Devices" list. To add the device to the "Permitted Devices" list, select the device from the "Pending Devices" list, enter the options menu and then select "Move" (page 56).

➡ A maximum of 20 connectable devices have been set. Delete unnecessary devices from the "Permitted Devices" list, and then set "Access Permission Settings" to "Auto," or move the device from "Pending Devices" to "Permitted Devices" (page 56).

➡ Server operation of the unit is suspended if the unit is conducting one of the following operations.
- Playing a track stored on the server (the unit is operating as a player)
- Updating the system application
- Formatting the system

➡ The unit cannot stream audio content to multiple players. The unit can connect to only one player at a time.

A player cannot play tracks on the iPod/iPhone placed on the unit.

➡ Track information on the connected iPod/iPhone has been updated. For this reason, the player may sometimes be unable to obtain the correct track information. If this is the case, the information on the player device should be refreshed.

The unit cannot be turned on automatically when accessed by devices on the network.

➡ The unit itself does not support the Wake-on-LAN standard. Therefore the unit cannot be turned on by Wake-on-LAN when "Network Standby" is set to "Off." Set "Network Standby" to "On" so that the unit can respond to operations by other devices via a network (page 18).

A player cannot receive audio content from the unit.

➡ Audio streaming from the unit will depend on the function selected and the status of the unit. For details on audio streaming from the unit, see "About the status of the unit and the sound sources for audio streaming" (page 52).

The unit cannot stream DAB/DAB+ (UK model only).

➡ You may not have performed DAB/DAB+ initial scan. Enter the options menu and select "Initial Scan" to obtain a service component list (page 36).

The unit cannot play the track that is currently being played by the PARTY host.

➡ The PARTY host is playing a track of an audio format that cannot be played on the unit.

➡ It may take a while before the playback sound is output.

The unit has joined an unintended PARTY.

➡ The PARTY feature is being used by several devices at the same time when the unit tries to join a PARTY, the unit may not be able to join the desired PARTY. Close all other instances of the PARTY feature except the desired one, then join the desired PARTY.

Music Services

You cannot connect the unit to a service.

- ➡ Make sure that the router/wireless LAN router/access point is turned on.
- ➡ Confirm the network status. Enter the settings menu and select “Network Settings” - “Tools” - “Connection Diagnosis” (page 32). If an error occurs, an error number appears and “!” appears next to the error item.
- ➡ When the unit is connected via a wireless network, move the unit and the wireless LAN router/access point closer to each other and perform the setup again.
- ➡ If your contract with your Internet provider limits Internet connection to one device at a time, this device will not be able to access the Internet when another device is already connected. Consult your carrier or service provider.

The sound skips.

- ➡ The bandwidth of your wireless LAN may be too low. Move the unit and the wireless LAN router/access point closer to each other, without any obstacles between them.

The elapsed time is not displayed on the playback display.

- ➡ The elapsed time may not be displayed depending on the content.

Play Timer

“Date&Time Error” appears.

- ➡ If the clock on the unit has not been set, you cannot set the Play Timer. Set the clock before setting the Play Timer (page 23).

“Time Error” appears.

- ➡ The ending time for the Play Timer cannot be the same as the starting time.

Play Timer setting does not function when the starting time is reached.

- ➡ A power failure occurred while the timer setting was in standby mode or the power cord was disconnected.

Others

The unit works poorly.

- ➡ The unit may be under the influence of static electricity or other factors. In this case, restart the unit. If the unit still works poorly, reset the unit (page 64).
- ➡ If a warning message appears, follow the instructions given by the message.

The unit does not respond to any operations. The unit does not work correctly.

- ➡ The unit’s internal system may be malfunctioning, or the unit may be suffering from strong electrical noise caused by power supply abnormalities due to being dropped, excessive static electricity, or lightning. In this case, disconnect the power cord, wait about 40 seconds, and then reconnect it.

Messages

Common messages

Browse Limit

You tried to select the 11th level in a file tree while the unit can select down only to the 10th level.

Cannot connect.

[Network settings]
The unit cannot connect to a network, or the unit cannot obtain the IP address because it cannot connect to the DHCP server for some reason (e.g., you input an incorrect WEP key). Check the network connection (page 32) or go to the network settings procedures and input the security key (WEP Key, WPA/WPA2 Key) again (page 25).

[Clock setting (Date&Time Settings)]
The unit cannot connect to the NTP server. Check that the NTP server address is correct.

Cannot connect to server.

The unit cannot connect to the server because the server may be turned off or the server may not be connected to a network. Turn on the power of the server or check if the server is connected to a network correctly.

Cannot Play

You tried to play audio content that the unit cannot play.

Cannot Retrieve Info

The unit cannot retrieve information from the server.
The unit failed to obtain the registration code for the Music Services settings. Check the registration code again (page 46).

Data Error

The selected audio content (data) has been damaged.

No Content

There is no content in the selected folder on the server.

No Preset

You selected a preset number for which no station is assigned.

No Results

There is no item that corresponds to the keyword used to search for that item.

No Service

There is no service available. Perform DAB/DAB+ Initial Scan (page 36), or refresh the service list (page 45).

Not Available

The operation that you performed is unavailable or invalid.

Network settings

Input Error

The string of letters and numbers you have entered is not correct.

Not found.

The unit cannot find the access point.

The same address is already set.

You entered the same string of numbers both for the primary DNS server address and the secondary DNS server address.

iPod/iPhone

Cannot connect to device

The unit failed to connect to the iPod/iPhone.

Insert iPod or iPhone

An iPod/iPhone is not placed on the unit.
This message may appear when the power of the connected iPod/iPhone is drained.

Unsupported device connected

The connected iPod is not supported by the unit.

Home Network

Access denied.

The unit is not allowed to connect to the server. Register the unit with the server.

Cannot delete.

The unit cannot delete a server from the server list or the “Permitted Devices” list.

Cannot delete server. Stop Playback.

You tried to delete a server while it is streaming audio content to the unit.

No more can be added.

You cannot add anymore items. (Appears when you try to add a server to a list.)

No Server

There is no server that the unit can connect to. Try refreshing the server list (page 43).

Music Services

Cannot refresh Service List.

The unit cannot refresh the service list for some reason (the unit is not connected to a network, etc.). Check the network connection (page 32).

PARTY

Cannot receive PARTY data.

The unit cannot obtain the audio content streamed by the PARTY host. Check the network connection (page 32). If the unit is connected to the network correctly, check the status of the PARTY host device.

Enable PARTY STREAMING Setting.

The unit is set to disable the PARTY STREAMING function. Set the “PARTY STREAMING” setting to “On” (page 57).

No PARTY STREAMING.

You tried to join a PARTY while there is no PARTY currently being hosted by other devices.

PARTY not available.

The unit has failed to start or join a PARTY as there are no devices that can join the PARTY.

Timer

Date&Time Error

You tried to select the timer without first setting the clock.

Time Error

The ending time that you tried to set for the Play Timer is the same time as the starting time.

System update

Cannot download.

The unit failed downloading the update data while performing the system update. Enter the settings menu and update the system again (page 62).

Cannot update.

The unit cannot update the system application. Contact your nearest Sony dealer.

Download Error

The unit cannot download the update data. Reset the unit (page 64), then enter the settings menu and update the system again (page 62).

Others

Internal Error

An internal error has occurred. Disconnect the power cord from the wall outlet, wait for a while, then reconnect it.

Setup data error

The data location that holds various settings has been initialized. Perform the setup operations again.

Unexpected error

An unexpected error has occurred. Perform the operation again. If the unit does not work correctly, reset the unit (page 64).

Precautions

On safety

- Completely disconnect the power cord (mains lead) from the wall socket (mains) if it is not going to be used for an extended period of time. When unplugging the unit, always grip the plug. Never pull the cord itself.
- Should any solid object or liquid get into the unit, unplug the unit, and have it checked by qualified personnel before operating it again.
- The AC adaptor and power cord can be changed only by a qualified service facility.

On placement

- Do not place the unit in an inclined position or in locations that are extremely hot, cold, dusty, dirty, humid, lacking adequate ventilation, subject to vibration, direct sunlight, or a bright light.
- Be careful when placing the unit or speakers on surfaces that have been specially treated (for example, with wax, oil, polish) as staining or discoloration of the surface may result.
- If the unit is brought directly from a cold to a warm location or is placed in a very damp room, moisture may condense inside of the unit, and cause the unit to malfunction. In this situation, leave the unit turned on for about an hour until the moisture evaporates.

On heat buildup

- Heat buildup on the unit during operation is normal and is not cause for alarm.
- Do not touch the cabinet if it has been used continuously at a high volume because the cabinet may have become hot.

About the AC adaptor

- Use the AC adaptor supplied with this unit. Do not use any other AC adaptor since it may cause this unit to malfunction.

Polarity of the plug

- Connect the AC adaptor or the power cord to an easily accessible AC outlet. Should you notice an abnormality in the AC adaptor or the power cord, disconnect it from the AC outlet immediately.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- If you are not going to use this unit for a long time, be sure to disconnect the power supply. To remove the power cord from the wall outlet, grasp the adaptor plug itself; never pull the cord.

About this unit

- If you have connected to an outside network, such as the Internet, and have allowed access from other devices, unauthorized access by malicious outsiders can occur depending on your network configuration. It may cause damages such as data falsification. To avoid this problem, before using this unit, you need to:
  - Use a router and configure it correctly.
  - Register the equipment that is to access this unit.
- It is prohibited to send or leave copyrighted products to/on an out-of-home network which can be accessed from many people without the author's permission by the Copyright Act.
- About DLNA support:
  This product is designed in accordance with DLNA Guideline v1.5. This product is commercialized to gain formal DLNA accreditation. This product may be upgraded to maintain interconnectivity.

On the speaker system

This speaker system is not magnetically shielded, and the picture on nearby TV sets may become magnetically distorted. In this situation, turn off the TV, wait 15 to 30 minutes, and turn it back on. If there is no improvement, move the speakers far away from the TV.

Do not drop this unit

- Do not subject the unit to strong shocks. It may cause the unit to malfunction.
- Do not exert strong pressure on the front side of this unit where the speakers are mounted.

On volume adjustment

If you raise the volume while listening to a segment containing only noise (as you might do in the case of a vinyl record), a sudden output of high-volume sound may cause damage to the speakers. Make sure to lower the volume before the start of playback.

Consideration for others

Keep the volume at a moderate level out of consideration for your neighbors, especially at night.

Cleaning the cabinet

Clean this unit with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as thinner, benzine, or alcohol.

Specifications

Wireless LAN section

Compatible standards:
IEEE 802.11 b/g
(WEP 64 bit, WEP 128 bit, WPA/WPA2-PSK (AES), WPA/WPA2-PSK (TKIP))

Radio frequency:
2.4 GHz

DAB/DAB+ tuner section (UK model only)

Tuner:
DAB/DAB+ stereo tuner

Antenna (aerial):
DAB/DAB+ wire antenna

Frequency range:
Band-III: 174.928 (5A) MHz – 239.200 (13F) MHz

DAB/DAB+ frequency table (Band-III):

Frequency	Label
174.928 MHz	5A
176.640 MHz	5B
178.352 MHz	5C
180.064 MHz	5D
181.936 MHz	6A
183.648 MHz	6B
185.360 MHz	6C
187.072 MHz	6D
188.928 MHz	7A
190.640 MHz	7B
192.352 MHz	7C
194.064 MHz	7D
195.936 MHz	8A
197.648 MHz	8B
199.360 MHz	8C
201.072 MHz	8D
202.928 MHz	9A
204.640 MHz	9B
206.352 MHz	9C
208.064 MHz	9D
209.936 MHz	10A
211.648 MHz	10B
213.360 MHz	10C
215.072 MHz	10D
216.928 MHz	11A
218.640 MHz	11B
220.352 MHz	11C
222.064 MHz	11D
223.936 MHz	12A
225.648 MHz	12B
227.360 MHz	12C
229.072 MHz	12D
230.784 MHz	13A
232.496 MHz	13B
234.208 MHz	13C
235.776 MHz	13D
237.488 MHz	13E
239.200 MHz	13F

Inputs/Outputs

DAB/DAB+ Antenna terminal (UK model only):
75 Ω unbalanced

AUDIO IN jack:
Stereo mini jack
Voltage: 1.0 V

iPod/iPhone dock:
Output voltage: DC 5.0 V
The maximum output current: 500 mA

Network port:
10BASE-T/100BASE-TX

General

Power requirements:
AC adaptor
Input: 100 - 240 V AC, 50/60 Hz
Output: DC 19.5 V 2.0 A

Power consumption:
10 watts

Approx. 5.3 watts at the network standby - on mode
0.5 watts or lower at the network standby - off mode

Dimensions (w/h/d) (including projecting parts and controls) (approx.):
366 mm × 148 mm × 170 mm (14 $^{1}/_{2}$ in. × 5 $^{7}/_{8}$ in. × 6 $^{3}/_{4}$ in.)

Mass (approx.):
2.0 kg (4.4 lb)

Operating temperature:
+5 °C to +35 °C (+41 °F to +95 °F)

Operating humidity:
25% to 80%

Supplied accessories:
See page 10.

Design and specifications are subject to change without notice.

- Standby power consumption: 0.5 W
- Halogenated flame retardants are not used in the certain printed wiring boards.

Compatible iPod/iPhone models

You can use the following iPod/iPhone models on this unit. Update your iPod/iPhone with the latest software before using it.

iPhone

iPhone 3G

iPhone 3GS

iPhone 4

iPod touch
1st generation

iPod touch
2nd generation

iPod touch
3rd generation

iPod touch
4th generation

iPod
5th generation
(video)

iPod classic

iPod nano
1st generation

iPod nano
2nd generation
(aluminum)

iPod nano
3rd generation
(video)

iPod nano
4th generation
(video)

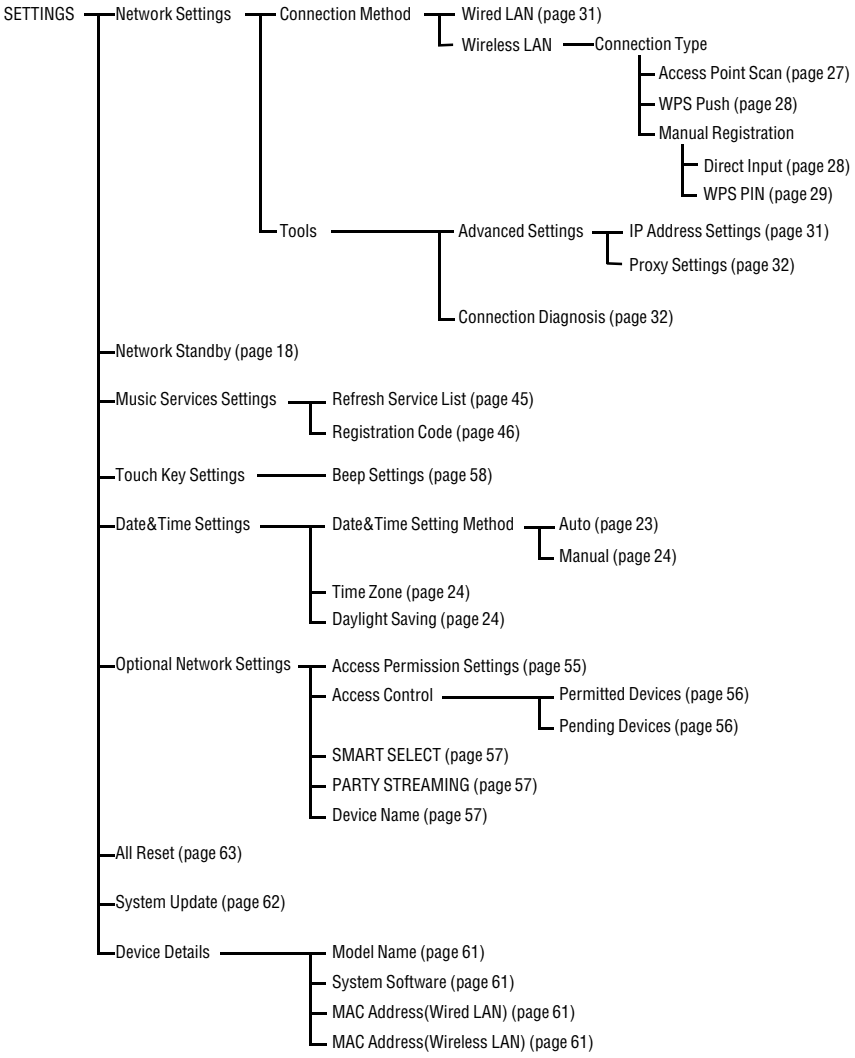
iPod nano
5th generation
(video camera)

iPod nano
6th generation

“Made for iPod,” and “Made for iPhone” mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards.
Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.
Please note that the use of this accessory with iPod or iPhone may affect wireless performance.

The menu tree for the settings menu

You can set the various settings using the settings menu. The following menu tree shows an overview of the settings for the settings menu.



Glossary

AAC

Abbreviation for Advanced Audio Coding. It is a standard for audio file compression determined by the MPEG (Motion Picture Experts Group), an ISO (International Organization for Standardization)/ IEC (International Electrotechnical Commission) working group.

Bit rate

The bit rate is a measure of data volume expressed in bits per second (bps).

Byte

One of the fundamental units used to express digitized data in computers. Digitized data is commonly expressed in binary digits (zeros and ones). A single unit of data is one bit. One byte consists of eight bits.

Condensation

Condensation can occur in the unit when there is a rapid rise in temperature, as when a heater is turned on. If condensation occurs, keep the unit turned off until the moisture evaporates.

DHCP

Abbreviation for Dynamic Host Configuration Protocol. A system for automatically allocating configuration data required for an Internet connection.

DLNA

Abbreviation for Digital Living Network Alliance. The DLNA is a nonprofit organization that establishes design guidelines for digital content shared over networks. For details, see http://www.dlna.org/home

DNS

Abbreviation for Domain Name System. A server that translates domain names to IP addresses, or IP addresses to domain names. A DNS is identified by an IP address. Also called a “DNS server.”

HE-AAC

Abbreviation for High-Efficiency Advanced Audio Coding. Compare to AAC, it realizes high sound quality with low bit rate.

Internet Service Provider

A company that offers a connection service to the Internet.

IP address

IP addresses usually consist of four groups of up to three digits each, separated by a period (such as 192.168.239.1). All devices on a network must have an IP address.

LAN

Abbreviation for Local Area Network.
LAN is a general name for networks set up for communication among devices including computers, printers, and fax machines in relatively small areas such as offices or buildings.

MAC address

Abbreviation for Media Access Control address. It is an identification name assigned to all network devices. Each device has its own address and there are no duplicate addresses. A MAC address may be necessary when identifying the unit separately from other devices (such as a DLNA server).

MP3

Abbreviation for MPEG-1 Audio Layer3. It is a standard for audio file compression determined by the MPEG (Motion Picture Experts Group), an ISO (International Organization for Standardization) working group. It enables compression of audio files to about 1/10 of the data size of a standard compact disc. Since the MP3 encoding algorithm is disclosed, there are various encoders/decoders that are compliant with this standard. The MP3 standard is therefore widely used in the computer field.

Network key (security key)

An encryption key used to limit the devices with which communication can occur. It is used to provide higher security for devices communicating via a wireless LAN router/access point.

Proxy

A program or a server that provides Internet access to computers within a firewall or quicker downloading of web pages.

Router

A device that bridges networks, converting the protocols and addresses of each network. When connecting multiple network devices to the Internet, a router is necessary. The term “router” by itself may refer to any of these devices.

SSID

Abbreviation for Service Set IDentifier. It is a name that identifies a particular access point within an IEEE 802.11 wireless LAN. To connect with an access point, a client device must be set with the same SSID. SSIDs can be up to 32 characters long. For higher security, a network key is normally also used. In this case, connection cannot occur unless the SSID matches the network key.

WEP

Abbreviation for Wired Equivalent Privacy. An encryption key used in wireless LAN networks. As an IEEE standard based on RC4 algorithm cryptography, WEP is used to secure IEEE 802.11b wireless networks. During the transmission of a message between a wireless LAN access point and a client device, the sending side encrypts the data and the receiving side decrypts it. For communication to occur, both devices must use a common code key, which is called the "WEP key." The encryption level is indicated by the bit count of the key; e.g., 64 bits or 128 bits. The higher the bit count, the higher the security level.

WMA

Abbreviation for Windows Media Audio. WMA is audio compression technology developed by Microsoft Corporation that allows audio files to be compressed to about 1/22 of the data size of a standard compact disc.

WPA

Abbreviation for Wi-Fi Protected Access. An encryption standard for wireless LAN networks created by the Wi-Fi Alliance to remedy a number of serious security problems in the WEP system. In addition to the network name (SSID) and encryption key (WEP), this protocol uses a user authentication framework called "EAP" (Extensible Authentication Protocol) and a protocol called "TKIP" (Temporal Key Integrity Protocol) which automatically updates the encryption code at regular intervals for higher security.

WPA2

Abbreviation for Wi-Fi Protected Access 2. An encryption standard for wireless LAN networks. As an upgraded version of WPA created by the Wi-Fi Alliance, this standard uses AES (Advanced Encryption Standard) cryptography to provide stronger security than WPA.

WPS

Abbreviation for Wi-Fi Protected Setup. A wireless network standard created by the Wi-Fi Alliance to allow you to set up a wireless network easily. A push button configuration method and a PIN code method are available.

DAB/DAB+ (Digital Audio Broadcasting)-related terms (UK model only)

Dynamic label segment

The text data transmitted for each channel or service.

Ensemble label

In DAB/DAB+, multiple digital radio channels are transmitted using a single radio transmission or frequency. A group of channels sent this way is called an "ensemble" and "ensemble label" is the name of such a group.

Service label

The name of an individual digital radio channel or service.

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